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PERIODICAL OF THE UNIVERSITY OF DUBROVNIK

SVEUČILIŠTE U DUBROVNIKU
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IZVORNI ZNANSTVENI RAD

ORIGINAL SCIENTIFIC PAPER

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EKONOMSKA MISAO U ANTIČKOJ MEZOPOTAMIJI

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Sažetak

U radu se istražuje i analizira ekonomska misao u antičkoj Mezopotamiji, i to posebice u Sumeru, Babiloniji i Asiriji. Iako sustavne ekonomske misli u Mezopotamiji nije bilo, pojedine ekonomske ideje i misli mogu se naći u nekim odredbama zakonika koje se odnose na gospodarstvo, kao i u zakonskom uređenju pojedinih situacija iz odnosa sudionika u gospodarstvu. Ekonomske ideje i misli istražene su u odredbama Ur-Nammuovog zakonika, Zakona iz Ešnune (Bilalamovog zakonika), Hamurabijevog zakonika, kao i Asirskih zakona iz vremena Tiglat-Pilesera I.

Ključne riječi: ekonomska misao; Mezopotamija; Sumer; Babilonija; Asirija; zakonik.

1. UVOD

U antičkoj Mezopotamiji, zemlji između rijeka Eufrata i Tigrisa, još u četvrtom tisućljeću pr. Kr. nastala je najstarija civilizacija koju su oblikovali Sumerani. Mezopotamija se smatra i kolijevkom zapadne civilizacije koja se kasnije formirala pod utjecajem Grčke i Rima. Na prostoru Mezopotamije prvi put su se pojavili gradovi, država, pismo, tehnički napretci koji su omogućili veću proizvodnju (plug, točak, kola, alati od kovina i dr.), ali i egzaktna znanja, škole, te prvi pisani zakonici.

O sustavnoj ekonomskoj misli u Mezopotamiji, kao uostalom i u čitavom antičkom svijetu, ne može se govoriti. Pojedine ekonomske ideje i misli moguće je tražiti u nekim odredbama zakonika koje se odnose na gospodarstvo (utvrđivanje

pojedinih ekonomskih kategorija – zakupnina, nadnica, kamata), kao i na zakonsko uređenje pojedinih situacija iz odnosa sudionika u gospodarstvu.¹

U radu će se nakon kratkih napomena iz povijesti antičke Mezopotamije dati pregled dostignuća u Sumeru, Babiloniji i Asiriji, a posebice s aspekta razvoja gospodarstava te ekonomskih ideja i misli koje će se istražiti u Ur-Nammuovom zakoniku, Zakonima iz Ešnune (Bilalamovom zakoniku), Hamurabijevom zakoniku i Asirskim zakonima iz vremena Tiglat-Pilesera I.

2. KRATKE NAPOMENE IZ POVIJESTI ANTIČKE MEZOPOTAMIJE

Mezopotamija (staroperzijski *Miyanrudan*, grčki prijevod *Μεσοποταμία* – „Zemlja između dvije rijeke“) je područje u jugozapadnoj Aziji između rijeka Eufrata i Tigrisa, od Armenskog visočja do Perzijskog zaljeva. Obuhvaća aluvijalno nizinsko područje omeđeno planinama i pustinjom površine oko 350.000 km². Danas najveći dio pripada Iraku, a manji dio Iranu i Siriji.

U ljudskoj povijesti nakon paleotika (starijeg kamenog doba), a prije metalnog doba (u različitim dijelovima svijeta između 10. i 4. tisućljeća prije Krista) bilo je razdoblje neolitskog ili mlađeg kamenog doba.² U tom razdoblju čovjek je usavršio izradu lovačkog oružja, naučio je izrađivati glinene posude, pripitomio je neke životinje i počeo uzgoj divljih žitarica, te je prešao s nomadskog na sjedilački način života. U Mezopotamiji su se neolitska dostignuća prvo pojavila u brdskim područjima gdje u 5. i 4. tisućljeću pr. Kr. na nekim područjima uz gornje tokove Eufrata i Tigrisa, a prema nalazima, dolazi do nastanka naselja, podjele rada i planskog vođenja života. Međutim, na tom području dolazi do prekida razvoja koji se

¹ U literaturi se o ekonomskoj misli u Mezopotamiji, između ostalih, mogu naći i sljedeća mišljenja.

Povijest ekonomske misli starog Istoka još nije istražena iako se u zemljama starog Istoka u spomenicima i dokumentaciji nalaze prvi začetci ekonomske misli. Tu nastaje rana ekonomska misao koja je vršila određeni utjecaj na kretanja u gospodarstvu. Tako se u Hamurabijevom zakoniku iznose stavovi koji se tiču ekonomskih odnosa u tadašnjem društvu. Prema: B. Šoškić, *Razvoj i osnove savremene ekonomske misli*, Savremena administracija, Beograd, 1988., str. 7.

Hamurabijev zakonik je jedan od najstarijih ekonomskih spomenika kojim se pruža zaštita privatnom vlasništvu nad zemljištem i ostalim sredstvima za proizvodnju. Ekonomska misao Asirije ima vrlo slična obilježja kao ona u Babiloniji, a iz asirskih zakona moguće je donekle pratiti proces nastanka privatnog vlasništva nad zemljištem. Prema: O. Blagojević, *Ekonomske doktrine*, Privredni pregled, Beograd, 1983., str. 36.

Hamurabijev zakonik odražava dosta zrelu ekonomsku misao za vrijeme u kojem je nastao. Prema: M. Marković, *Istorija ekonomske misli*, I. knjiga, Univerzitetska riječ, Titograd, 1984., str. 18.

Oblici obrade ekonomske materije u dokumentima starog Babilona i Asirije pretežno imaju karakter normativnih odredbi i nisu rezultat metode koja bi dala širi teorijski i znanstveni karakter, pa je njihov utjecaj na oblikovanje kasnije znanstvene ekonomske teorije neznatan. Prema: D. Sabolović, *Historija političke ekonomije*, Informator, Zagreb, 1972., str. 7.

² Preciznije razmatrano pretpovijesno razdoblje počinje od pojave čovjeka do povijesnog razdoblja. Dijeli se na starije kameno doba (paleolitik, 2,5 milijuna do 10000 g. pr. Kr.), srednje kameno doba (mezeolitik, 10000 do 6500 g. pr. Kr.) i spomenuto mlađe kameno doba (neolitik, 6500 do 3500 g. pr. Kr.), nakon čega s pojavom pisma nastaje povijesno razdoblje.

nastavlja na ušću Eufrata i Tigrisa u zemlji Sumerana – naroda o kome ne znamo ni kada se, ni odakle doselio, pa čak ni kojoj široj etničkoj skupini pripada. Tu se već u 5. tisućljeću pr. Kr. nalazilo naselje Eridu s hramom od opeka, a na prijelazu u 4. tisućljeće pr. Kr. nikli su brojni gradovi poput Ura, Lagaša i Nipura.³

Upravo je najstarija civilizacija nastala u Mezopotamiji. Nju su od 4000. do 1000. g. pr. Kr. predvodili različiti narodi, a posebice Sumerani, Akadani i Asirci na sjeveru i Babilonci na jugu. Potkraj 6. st. pr. Kr. Perzijanci osvajaju Babilon i vladaju cijelim područjem Mezopotamije. Aleksandar Veliki je 331. g. pr. Kr. porazio Perziju i zavladao Mezopotamijom. Unatoč brojnim pokušajima (Trajan, Marko Aurelije) i osvajanjima teritorija, Rimljani nisu nikad u Mezopotamiji trajnije učvrstili vlast. U brojnim sukobima s Rimljanima Partsko Carstvo na području Mezopotamije trajalo je do 3. st. Nakon vladavine Parta (istočnoiranskog naroda) i Partskog razdoblja nastupa Sasanidsko razdoblje od 226. godine kad je Mezopotamijom zavladao novoperzijska dinastija Sasanida sve do 637. godine kad su Arapi zavladao Mezopotamijom.

Neovisno o spomenutim razdobljima, zajedničko obilježje naroda u Mezopotamiji je uporaba najstarijeg klinastog pisma koje je tu nastalo.⁴ Sumerani su prvi formirali vrlo razvijenu kulturu koju su kasnije Akadani, Babilonci i Asirci nastavili razvijati. Tako je kultura ostala zajednička bez obzira koji je narod vladao na prostoru između Eufrata i Tigrisa, pa se uobičajeno govori o jedinstvenoj mezopotamijskoj kulturi.

Također treba istaći i sljedeće.

Jedna od najznačajnijih prekretnica u povijesti čovječanstva je pomak od nomadskog načina života prema stalnim naseljima. Promjena od lova i sakupljanja plodova do sadnje i stočarstva događala se neovisno u mnogim područjima na zemlji, a u Mezopotamiji se to događalo u 7. i 6. tisućljeću pr. Kr. Iako je zemljište u Mezopotamiji bilo plodno, nedostatak kiše bio je veliki problem. S druge strane, za razliku od npr. poplava Nila koje su ostavljale korisne naslage mulja, poplave Eufrata i Tigrisa zbog prirode tla kojom rijeke teku pustošile su sve pred sobom.⁵ Upravo

³ E. Kale, *Povijest civilizacija*, VI. izdanje, Školska knjiga, Zagreb, 1990., str. 16.

⁴ Prvi pisani jezik na svijetu u Mezopotamiji ispisivao se na pločice od vlažne riječne gline, koje su se sušile da bi zapis postao neizbrisiv. Znakovi su se u te pločice utiskivali oštro odreznim krajem trske, što im je i dalo klinasti oblik, pa se to pismo i zove klinastim. – C. Aydon, *Povijest čovječanstva*, Znanje, Zagreb, 2012., str. 44.

⁵ Ovdje je zanimljivo reći da se izazovna Biblijska priča o Velikom potopu koji je preživio samo Noa sa svojom obitelji prvo pojavila u Mezopotamiji. Naime, ep o Gilgamešu najstarije je poznato književno djelo koje je u nekoliko inačica sačuvano, a najpotpunija je asirska verzija napisana na dvanaest ploča. To je epska poema o kralju Gilgamešu od Uruka, vladaru iz trećeg tisućljeća pr. Kr. Ploče su između ostalih otkrivene 1839. godine u ruševinama Ninive, a 1872. su prevedene na engleski. Po njima je vidljivo da su iz tog epa neki motivi preuzeti i da su ušli u Bibliju. Tako je na 11. ploči (*Ep o Gilgamešu*, e-knjiga, www.antikvarneknjige.com/elektronske_knjige/detail-item_id-33, pristup: 14.8.2016., str. 41. – 48.) opisan Veliki potop smješten u slivove Eufrata i Tigrisa, a u kojem je umjesto Noe brod napravio Utapištim i u brod smjestio cijelu svoju obitelj, najbližu rodbinu i obrtnike svih vještina, a nakon povlačenja potopa u brodu je zastao na planini Nisir (Noina barka je zastala na planini Ararat). Očito je da Izraelci, koji su postavljali pitanja o početcima svijeta i čovječanstva, o tajni zla u svijetu i drugom, nisu zanemarili ep o Gilgamešu već su dijelove preuzeli i prilagođavali svom viđenju Boga koji je stvorio čovjeka ali ga i uništava nakon što je zlo počelo vladati, međutim sažaljeva se i pravi savez s Noom i njegovim potomcima.

zato, tražeći način da se izbjegnu te opasnosti, u Mezopotamiji su se u najstarija vremena regulirali tokovi tih rijeka izgradnjom mreže kanala koji su istovremeno služili za navodnjavanje, ali i za plovidbu i povećanje prometnih mogućnosti uz postojeće karavane. Upravo prednosti bržeg i sigurnijeg transporta plovidbom brodovima na jedra, omogućili su razvoj trgovine i osnivanje i razvoj gradova-država duž tokova rijeka Eufrata i Tigrisa. S druge strane, izum pluga omogućio je učinkovitiju poljoprivrednu proizvodnju u kojoj je južna Mezopotamija bila čuvena po visokim prinosisima žitarica. Hrane je bilo u izobilju, što je pogodovalo rastućem stanovništvu.⁶ Jednako tako, jedan od najznačajnijih izuma svih vremena je točak, a prema nalazima i natpisima nađenim na glinenim pločama njegov izum se vezuje uz Mezopotamiju, odnosno Sumerane i grad Ur gdje se 3500 godine pr. Kr. koristio u izradi lončarije, a 3200 g. pr. Kr. počeo se upotrebljavati u transportu (normalno, razvoj i masovna upotreba točka u svim tehnologijama počinje nakon industrijske revolucije).

Mezopotamija se smatra kolijevkom zapadne civilizacije koja se kasnije formirala pod utjecajem Grčke i Rima. Na tom prostoru prvi put su se pojavili svi civilizacijski oblici – gradovi, država, pismo, razvijena tehnika i veća proizvodnja, egzaktna znanja i škole, te bogata i razvijena trgovina koja je poticala okolna područja na ulazak u civilizacijski krug.⁷ Od Sumerana smo naslijedili sustav sudaca, porote, svjedoka i ugovora. Zakonske odluke su se primjenjivale i u gospodarstvu: razmjena zasnovana na ugovorima bez posredovanja novca na temelju trampe, pravila pri zapošljavanju, plaće za rad i sustav oporezivanja. Razvili su astronomiju, astrologiju, matematiku, numerologiju, medicinu i filozofiju. Prvi su uveli 12 znakova zodijaka, podijelili nebo na zviježđa, te utemeljili kalendar i izvršili podjelu na godine, mjesece, tjedne, dane, sate i minute.

U antičkoj se Mezopotamiji gospodarski život odvijao u okviru prilično živahno raščlanjenog i sustavno izgrađenog sklopa. Razina je tog zbivanja bila daleko viša nego li je to bio slučaj mnogo stoljeća kasnije i u zemljama koje su mnogo bliže našoj kulturnoj sferi. Pomislimo samo primjerice na stanje gospodarskog mrtvila i primitivnosti, koje je vladalo kroz najmanje tri stoljeća u pretežnom dijelu Europe poslije propasti zapadnorimskog carstva.⁸

U nastavku će se dati pregled dostignuća, posebice s aspekta ekonomskih ideja i misli u Sumeru, Babiloniji i Asiriji.

⁶ U području Mezopotamije nastale su najbogatije i najmoćnije nacije tog dijela svijeta kroz 2.000 godina. Planinska i pustinjska plemena često su upadala u to područje, pa su ljudi da bi opstali morali biti snažni i hrabri. Upravo zato ne čudi što su neki od najokrutnijih ljudi, najmoćnijih vojski i najambicioznijih vladara u antici iz Mezopotamije. – Prema: S. Sharma, *Reflections on the Philosophical Foundations of Economics*, Mikrorad, Zagreb, 2010, str. 100.

⁷ E. Kale, *isto djelo*, str. 16.

Asirske i babilonske teokracije imale su složene birokratske ustanove, razvijene pravne sustave, razgranate monetarne institucije i početne kreditne i bankarske odnose. – Prema: A. Dragičević, *Razvoj ekonomske misli*, CEKADE, Zagreb, 1987., str.10.

⁸ Prema: V. Lunaček, *Povijest ekonomskih doktrina*, Dom i svijet / Ekonomski fakultet, Zagreb, 2004., str. 45.

3. SUMER

Sumer je povijesna regija u južnoj Mezopotamiji, a sumerska civilizacija, oblikovana na donjim tokovima Eufrata i Tigrisa, odakle se širila prema sjeveru, bila je prva u povijesti i potakla je pojavu drugih civilizacija. Mnogo stoljeća bila je zaboravljena, a tek od 1849. godine, kada je britanski istraživač William Kenneth Loftus otkrio stari sumerski grad Uruk, počinje otkrivanje ostataka te civilizacije.

Sumer su naseljavali Sumerani, kao što je spomenuto, narod nepoznatog podrijetla koji je sam sebe nazivao „ljudi crnih glava“, a prvi podatci o Sumeranima potječu iz 4. tisućljeća pr. Kr.⁹ Sumer nije bio država, on se sastojao od nekoliko gradova-država koji su bili povezani trgovinom, zajedničkim jezikom i kulturom. Najpoznatiji gradovi bili su Ur, Uruk, Kiš, Nipur i Lagaš. U najvećim je gradovima u prosjeku živjelo oko 40.000 stanovnika, a u svojem usponu Ur je od oko 2030. do 1980. g. pr. Kr. bio najveći grad tada poznatog svijeta sa 65.000 stanovnika.¹⁰ Gradovi-države bili su neovisni, organizirani kao zasebne ekonomske i upravne zajednice koje su često bile u sukobima nastojeći proširiti svoja područja. Gradovi su bili utvrđeni zidinama, s mostovima preko kanala, vjerskim, stambenim i zanatskim četvrtima kojima su dominirali stepenasti hramovi zigurati. Sve zemaljsko pripadalo je Bogu pa je tako zemlja pripadala ensiju kao poslaniku Boga koji ju je dodjeljivao stanovništvu.

Sumerani su civilizaciju počeli oblikovati u drugoj polovici 4. tisućljeća pr. Kr. Pri kraju 4. i početkom 3. tisućljeća pr. Kr. došlo je do gospodarskog i političkog uzdizanja gradova-država, razvitka graditeljstva (kako nije bilo dostatnih količina kamena i drva za gradnju su upotrebljavali opeku), zanatstva, izgradnje kanala, unapređenja poljoprivrede i snažnog razvoja trgovine. Sumerani su, kao što je spomenuto, 3500 g. pr. Kr. poznavali točak i rabili ga u lončarenju, zatim plug, kola, alate od kovina (talili su rude koje su uvozili pa je obrada kovina bila vrlo razvijena), tkanje, pravili su keramiku, opeku i žbuku, te gradili zgrade sa samonosećim lukovima.¹¹ Osim tehničkih dostignuća, imali su velika saznanja o prirodi do koji se dolazilo iskustvom, promatranjem, istraživanjem i pokusima (od botanike, zoologije, mineralogije i zemljopisa do matematike i astronomije) Međutim, kao i u drugim

⁹ U literaturi se često navodi pretpostavka da je pradomovina Sumerana područje oko Kavkaza ili Kaspijskog jezera, te da pripadaju indoeuropskoj skupini naroda. Međutim, činjenica je da njihov jezik nije nalik niti jednom od izumrlih ili živih jezika.

¹⁰ T. Chandler, *Four Thousand Years of Urban Growth: An Historical Census*, St. David's University Press, 1987 – prema: M. T. Rosenberg, *Largest Cities Through History*, dostupno na: <http://geography.about.com/library/weekly/aa011201a.htm>, pristup: 14.8.2016. .

Prema istom izvoru Babilon je 612. g. pr. Kr. bio prvi grad na svijetu s preko 200.000 stanovnika. Međutim, gradovi-države u Sumeru sastojali su se od gradova i okolnih sela, a 2500 pr. Kr. dva najveća Uruk i Lagaš imali su po 200.000 žitelja (C. Aydon, *isto djelo*, str. 46.), dok je za vladavine Gudea (oko 2144. do 2124. pr. Kr. op.a.) Lagaš imao 216.000 žitelja (E. Kale, *isto djelo*, str. 26.).

¹¹ Dok su u srednjoj Europi ljudi još uvijek preživljavali kao lovci i skupljači u Mezopotamiji su Sumerani stvorili prvu veliku civilizaciju. Već su pronašli kotač i potom plug koji su vukli magarci ili volovi. Podigli su gradove u kojim je živjelo 50.000 stanovnika, brane kojim su gradove štitili od poplava, te kanale kojim su navodnjavali polja. – Prema: M. Mai, *Kratka povijest svijeta*, Mozaik knjiga, Zagreb, 2004., str. 19.

antičkim civilizacijama, osim Grčke, ta su saznanja bez teorijskih temelja, uopćavanja i znanstvenih pravila.

Nakon prvog razdoblja, razdoblja Uruka (kraj 4. i početak 3. tisućljeća pr. Kr.) slijedilo je drugo razdoblje Jemdet (Džemdet, Džamdat) Nasr nazvano prema mjestu u Iraku 100 km južno od Bagdada koje je otkriveno iskopavanjem 1926. godine, a trajalo je od 2800. do 2600. g. pr. Kr.¹² To razdoblje značajno je po širenju Sumera prema sjeveru, pojavi novih gradova-država, prodoru Sumita u Sumer (koji su asimilirani), te po nekim izvorima ujedinitelja cijelog Sumera vladara Kiša Mesilima. Sredinom 3. tisućljeća pr. Kr. na vlasti je I. urska dinastija,¹³ širi se Sumer od Perzijskog zaljeva do obala Sirije uz širenje trgovine i uzdizanje grada Lagaša. Međutim, već oko 2350. g. pr. Kr. veliki semitski vojskovođa Sargon osvojio je i ujedinio sve sumerske gradove i zavladao područjem od Sredozemnog mora do Perzijskog zaljeva. Za prijestolnicu je odabrao i izgradio grad Akad po kojem je semitski narod tog područja nazvan Akadani. Vladavina Akadana trajala je sljedećih dvije stotine godina bez bitnih napredaka kako u kulturi tako i u gospodarstvu.¹⁴ Gutejci su svrgnuli Akadsku državu, do temelja razorili grad Akad i vladali Sumerom oko stotinu godina za koje su vrijeme bili u potpunosti asimilirani. Svrgnuo ih je Uruk Utuhengal i nakon toga nastaje razdoblje „Sumerske renesanse“ – obnavljaju se gradovi-države, obnavlja se tradicija, dolazi do razvoja trgovine i obrta, uzleta graditeljstva (vrijeme izgradnje monumentalnih građevina), umjetnosti i književnosti. Osnivač treće dinastije (iz) grada-države Ura, Ur-Nammu vladao je od 2111. do 2094. godine pr. Kr., osvojio je sva područja Sumera i Akada i uspostavio je stare granice Akadske države. Obnovio je zemlju uz snažan razvoj graditeljstva. Učvršenje državne i posebno sudske vlasti rezultiralo je donošenjem Ur-Nammuova zakonika. Međutim, Sumer se za vrijeme vladavine Akadana i Gutejaca etnički izmijenio tako da su Sumerani bili manjina, akadski jezik je prevladavao (u sumerskoj renesansi službeni akadski jezik bio je zamijenjen sumerskim), došlo je do velikih društvenih

¹² Ove godine se često navode u literaturi, a prema nekim sumerolozima i izvorima razdoblje je trajalo otprilike 3200. – 3000 godine pr. Kr. – vidite npr. u: R. J. Mathews, *Jemdet Nasr: The Site and the Period*, *The Biblical Archaeologist*, American Schools of Oriental Research, Vol. 55, No. 4, December 1992, str. 196.

¹³ Prvu dinastiju iz Ura uspostavio je kralj Mesanepada (u kraljevskom redu spominju se kraljevi Mesh-Ane-pada, A-anne-pada, Meskiag-nuna, Elulu i Balulu) u 26. st. pr. Kr. O drugoj dinastiji iz Ura ne zna se puno (25. st. pr. Kr. - vladari Nauni, Mesh-ki-ang-nauna II), u to vrijeme grad Ur je bio u padu, izgubio je moć a kraljevanje je preuzela dinastija iz Adaba. Nakon pete dinastije iz Uruka kraljevanje je preuzela treća dinastija iz Ura s kraljem Ur-Nammu (prijelaz iz 21. u 20. st. pr. Kr. – u kraljevskom redu spominju se kraljevi Ur-Nammu, Shulgi, Amar-Suena, Shu-Suen i Ibbi-Suen), a oko 1950. g. pr. Kr. Amorićani osvajaju Sumer.

¹⁴ O Akadskoj državi vidite u: G. D. R. van Beest Holle et al., *Velika ilustrirana povijest svijeta*, Dugi svezak, Otakar Keršovani, Rijeka, 1974., str. 561. – 569.

razlika,¹⁵ pobuna i pokušaja osvajanja izvana.¹⁶ Pod navalom Amorićana i posebice Elamita Sumer gubi moć. Oko 1950. g. pr. Kr. osvojen je Ur, a posljednji sumerski vladar Ibbisin (Ibbi-Suen) pobjegao je u Elam istočno od Sumera (krajnji jugozapad Irana). Sumer postupno nestaje s običajima i životnim navikama Sumerana, međutim tekovine sumerske civilizacije preuzimaju narodi koji su u Mezopotamiji kasnije stvarali države.¹⁷

Gradovi-države Sumera razvili su trgovinu i tržišno gospodarstvo koje se temeljilo na robnom novcu i novčanoj jedinici šekel koja je bila određena mjera težine ječma. Kasnije je sredstvo razmjene bio bakar, pa srebro, mjed i zlato čija se vrijednost određivala po težini. U vrijeme III. urske dinastije u Sumeru su poslovala radionice u različitim djelatnostima – klesarstvo, stolarstvo, lončarstvo, tkalstvo, brodograditeljstvo – u kojim se zapošljavalo i više od 30 radnika u dobro organiziranoj proizvodnji uz strogi nadzor. Najznačajnije mjesto u gospodarskom životu Sumera imala je trgovina, a posebice međunarodna trgovina u kojoj su sumerski trgovci odlazili u druge zemlje, ali su i trgovci iz drugih zemalja dolazili u Sumer. Postojala su brojna sajmišta koja su nadzirali redari i gdje su na usluzi bili pisari za ugovore i bankari za pozajmice. Bankari su davali pretežno kratkoročne zajmove uz visoku kamatu od 20 do 25 %. Znajući da to šteti trgovini, vlast se borila protiv lihvara tako što je davala zajmove uz mnogo niže kamate.¹⁸

U Sumeru je sve manje ili više bilo normirano i propisano, a tko se nije pridržavao propisa kao prekršitelj je pozivan pred sud. Obrtnici su bili organizirani u cehove s upravom i poglavarom, trgovci u svoje udruženje, a svaki trgovački posao trebalo je zapisati i arhivirati. Radionice su vodile evidencije o proizvodnji, utrošenom materijalu, količini, težini i kvaliteti proizvoda, te isplaćenim nadnicama. Propisane su bile kamatne stope, naknade za neispunjene obveze, pravila nasljedstva, kako se privatno vlasništvo dijeli, a kako oporezuje i dr. Normalno, sustavne ekonomske misli u Sumeru, kao i inače u Mezopotamiji, nije bilo. O ekonomskoj misli, odnosno ekonomskim idejama može se govoriti samo u okviru onog što je ostalo zapisano u zakonicima, a odnosilo se na uređenje odnosa sudionika u praktičnom gospodarstvu,

¹⁵ U Sumeru je od početka postojala društvena raslojenost koju su urbanizacija i razvoj gospodarstva povećavali. Na vrhu je bio dvor s vladarom, izvan gradova su živjeli niži slojevi – zemljoradnici, stočari, ribari, a u gradovima su živjeli srednji i viši slojevi – trgovci, obrtnici, pisari, učitelji, državni službenici, vojni zapovjednici i svećenstvo. Postojali su i robovi iako ih je bilo relativno malo, a uglavnom su bili nesumerani i ratni zarobljenici. Međutim, i Sumerani su mogli postati robovima najčešće zbog nemogućnosti plaćanja dugova. Položaj žene u mnogočemu bio je ravnopravan položaju muškarca iako je vlast u obitelji imao otac. Pripadnost sloju određivala je sudbinu pojedinaca, a velike su razlike bile između malog broja bogatih i sve većeg bogaćenja viših slojeva, te sve lošijeg položaja nižih slojeva.

¹⁶ Treća dinastija iz Ura razvila je razgranatu mrežu lokalne birokracije radi prikupljanja poreza i doprinosa. Poticala je razvoj sustava za navodnjavanje, te porast stanovništva i broja naselja. Taj je pokušaj maksimalnog povećanja ekonomske i političke moći doveo do brzog sloma koji je imao katastrofalne posljedice po južnu Mezopotamiju. U sljedećem tisućljeću broj naselja smanjio se za 40, a površina naseljenih područja za 77 posto. Politička moć preselila se na sjever u Babilon. – Prema: J. A. Tainter, *Kolaps kompleksnih društava*, Naklada Jesenski i Turk, Zagreb, 2007., str. 23.

¹⁷ O povijesti Sumera opširnije vidite u: G. D. R. van Beest Holle et al., *isto djelo*, Prvi svezak, str. 313. – 328., a o sumerskoj renesansi u: *isto djelo*, Drugi svezak, str. 571. – 581.

¹⁸ E. Kale, *isto djelo*, str. 24.

kao i utvrđivanja (određivanja) pojedinih ekonomskih kategorija, kao što su npr. zakupnine, nadnice, porezi, kamate i dr.

Kao što je prije spomenuto, u Sumeru su nađeni ostatci prvog pisanog zakonika, Ur-Nammuova zakonika, odnosno zakonika kralja Ur-Nammua koji je bio utemeljitelj III. urske dinastije i kraljevao je od 2112. do 2095. g. pr. Kr. Treba istaknuti da Ur-Nammuov zakonik (kao ni drugi zakonici antičke Mezopotamije) nije bio pravni kodeks u suvremenom smislu toga pojma, već je slijedio sumersko običajno pravo. Od tog se čuvenog Zakonika nažalost sačuvao samo mali dio (veći dio je oštećen), napisan je na sumerskom jeziku na pločici formata 20 x 10, razdjeljenoj na osam stupaca - sa svake strane po četiri, a preveden je 1952. godine. Određuje blaže kazne od kasnije slavnog Hamurabijeva zakonika, a od malog dijela koji se odnosi na ekonomiju, odnosno na praktično gospodarstvo mogu se istaknuti tri zadnja sačuvana zakona, odnosno propisa koji udređuju odnose sudionika u obradi poljoprivrednog zemljišta.¹⁹

Uz Ur-Nammuov zakonik potrebno je istaknuti i Bilalamov zakonik ili Zakone Ešnune, antičkog sumerskog i kasnije akademskog grada, odnosno grada-države u središnjoj Mezopotamiji iz sredine 19. st. pr. Kr., također starijeg od glasovitog Hamurabijeva zakonika.²⁰

Za razliku od Ur-Nammuova zakonika koji je jako oštećen, Zakoni iz Ešnune (često u literaturi pripisivani vladaru Ešnune Bilalamu i nazivani Bilalamov zakonik) skoro su u potpunosti očuvani. U Iraku nedaleko od Bagdada 1945. i 1947. iskopane su dvije glinene pločice koje su kopija starijeg izvora i datiraju oko 1930. g. pr. Kr. Pisane su klinastim pismom na akademskom jeziku i vjerojatno sadrže odredbe kralja Bilalama, a 1948. godine prevedeni su i objavljeni. Zakonik je po sadržaju sličan Ur-Nammuovu zakoniku, a od odredbi koje se odnose na ekonomiju, odnosno praktično gospodarstvo izdvajamo one koje se odnose na zakupnine, nadnice i kamatne stope.

Utvrđuju se zakupnine za kola, volove i goniča, brod i brodar (kao i naknada u slučaju brodoloma), te žetelicu.²¹ Nadnice se utvrđuju za dan rada kao i za

¹⁹ 27' „Ako čovjek postupi nasilno i uzore obradivo polje (drugoga) čovjeka, ovaj podigne tužbu protiv onoga, pa se onaj o nju ogлуši, taj (ogлуšitelj) čovjek gubi troškove.“

28' „Ako čovjek poplavi vodom polje (drugoga) čovjeka, odmjerit će mu se tri *kura* žita za jedan *iku* polja (*kur* je mjera za zapreminu, a *iku* je mjera za površinu, op. a.).“

29' „Ako čovjek obradivo polje ustupi drugom čovjeku na obrađivanje, ovaj ga ne obradi, pa se polje zatravi, vlasniku polja odmjerit će se tri kura žita za iku.“

Prema: M. Višić, *Zakonici drevne Mesopotamije*, izdavači: S. Mašić i M. Višić, tisak: Prosveta, Beograd, 1985., str. 114.

²⁰ Ešnuna je bio grad sjeverno od Ura na obali rijeke Diyale pritoke Tigrisa, a postao je politički značajan nakon pada treće dinastije iz Ura.

²¹ 3. „Zakupnina za kola, volove i goniča iznosi jedan *pan* i četiri *seaha* žita. Ako se plaća u srebru, zakupnina iznosi trećinu *šekela*. On (gonič) će s njima (kolima i volovima) raditi cijeli dan.“

4. „Zakupnina za brod iznosi 2 *qa* za *kur*; zakupnina za brodar iznosi jedan *seah* i jedan *qa*. On (zakupljivač) će ih koristiti cijeli dan.“

5. „Ako brodar bude nemaran pa brod potopi, brodar će platiti sve što je s brodom potopljeno.“

mjesec dana.²² Kamata se propisuje u odnosu na zajam u srebru, te u odnosu prema zajmu u žitu.²³

4. BABILONIJA

Babilonija je bila antička država, kraljevstvo u Mezopotamiji na donjem toku rijeka Eufrat i Tigris u razdoblju između oko 1900. g. pr. Kr. pa do propasti 539. g. pr. Kr. kad Perzijanci osvajaju Babilon i otkad u Babiloniji nije bilo domaćih vladara. Kulturni centar i prijestolnica Babilonije bio je grad Babilon na mjestu gdje su rijeke Eufrat i Tigris najbliže jedna drugoj, oko 90 km južno od Bagdada u Iraku, a koji su kroz povijest osvajali vladari više različitih plemena. Babilon (akadski *Bab-ili*: vrata gospodnja) utemeljili su Sumerani u trećem tisućljeću pr. Kr. Spominje se prvi put na pločici Sargona Akadskog iz 24. st. pr. Kr. koji je od grada napravio središte svoje države. Narednih stoljeća moć i značaj grada je pao, postao je nevažan sve dok nije postao glavni grad pod vladavinom Hamurabija i otad je bio glavni grad Babilonije.²⁴

Povijest Babilonije započinje propašću Sumera. Semitski narodi, s jedne strane Amorićani, a s druge Elamiti, prodrli su u Sumer. Amorićani su zavladao Babilonom (često se 1894. g. pr. Kr. navodi kao godina osnivanja Babilona), a njihov vladar Sumu-abu osnivač je starobabilonske države (proglasio se babilonskim kraljem i prvi je kralj dinastije iz Babilona – amorićanske dinastije).²⁵ Hamurabi je bio šesti

7. „(Dnevna) zakupnina za žetelicu iznosi dva *seaha* žita; ako se plaća u srebru, njezina zakupnina iznosi dvanaest *grana*.“

Prema: M. Višić, *isto djelo*, str. 115.

²² 10. „Zakupnina za magarca staje jedan *seah* žita, a nadnica njegova goniča staje jedan *seah* žita. On će ga goniti cijeli dan.“

11. „Nadnica za najmljenika iznosi jedan *seah* srebra; njegova hrana staje jedan *pan* žita; dužan je raditi mjesec dana.“

Prema: *isto djelo*, str. 115. – 116.

²³ 18 A. „Za *šekel* (srebra) na ime kamate dobija se šestina *šekela* i šest *grana*; za jedan *kur* (žita) na ime kamate dobija se jedan *pan* i četiri *seaha*.“

19. „Čovjek koji daje na zajam pod uvjetom da mu se isto vrati, može zahtijevati da mu (dužnik) vrati dug u žitu s gumna.“

20. „Ako čovjek daje na zajam ... iskazujući vrijednost srebra u žitu, u vrijeme žetve dobija žito i svoju kamatu, jedan *pan* i četiri *seaha* za *kur*.“

21. „Ako čovjek daje na zajam srebro za srebro, dobija srebro i kamatu šestinu *šekela* i šest *grana* za *šekel* (srebra).“

Prema: *isto djelo*, str. 116.

²⁴ Za vrijeme svojih osvajanja Aleksandar veliki izabrao je Babilon za svoju prijestolnicu; 323. g. pr. Kr. umro je u Babilonu.

²⁵ Povijest Babilonije i babilonske civilizacije može se promatrati kroz nekoliko razdoblja: rano starobabilonsko razdoblje (oko 2017. do 1793. pr. Kr.); Hamurabijevo razdoblje (oko 1792. do 1750. pr. Kr.); slabljenje i pad Babilona (oko 1750. do 1595. pr. Kr.); srednje babilonsko razdoblje (oko 1595. do 1000. pr. Kr.); razdoblje slabosti i asirske prevlasti (oko 1000. do 627. pr. Kr.); novobabilonsko carstvo (626. do 539. pr. Kr.).

O starobabilonskom i Hamurabijevom razdoblju vidite u: G. D. R. van Beest Holle et al., *isto djelo*, Drugi svezak, str. 582. – 592., a o novobabilonskom carstvu nakon sloma Asirije i kralju Nabukodonosoru (ili Nebukadnezaru II.) koji je kraljevao od 604. do 562. g. pr. Kr. i koji je obnovio Babilon i izgradio mnoge

kralj Prve babilonske dinastije koji je pobijedio vladara Larse Rimisina, protjerao elamite iz južne Mezopotamije, te je ujedinio pod svojom vlasti Sumer, Akad, Elam i Asiriju. Osnivač je Babilonskog carstva, a njegovu vladavinu obilježilo je širenje carstva. Vladao je od 1792. do 1750. g. pr. Kr. Porazio je Asiriju 1755. g. pr. Kr. i nastojao je reorganizirati i ujediniti veliko carstvo uz normalan suživot različitih naroda. Bio je u prvom redu diplomat, a zatim osvajač. Državu je ustrojio centralistički, a gospodarstvo, kulturu i općenito babilonsku civilizaciju doveo do vrhunca.

O gospodarstvu u Babiloniji može se reći sljedeće. Najveće bogatstvo Babilonije bila je plodna zemlja koja je omogućavala bogate žetve i uzgoj stoke. Za vrijeme prve dinastije babilonska država je, posebice na sjeveru, svu obradivu zemlju dala na korištenje privatnicima – u prvom redu slobodnim seljacima. Kako je na zemljišni posjed određen porez, u cilju olakšanog sakupljanja poreza svi zemljišni posjedi ubilježeni su na glinenim pločicama i pohranjeni, a takav sređeni popis je u izvjesnom smislu preteča današnjeg katastra. U novčarskim poslovima uobičajena valuta bilo je srebro, dok je kovani novac bio nepoznat. Srebrna valuta u težinskim jedinicama bila je podijeljena na talent koji je imao 60 mina, a mina je imala 60 šekela (mina je težila otprilike 505 gr., a šekel 8,4 gr.).²⁶

Obrtništvo locirano u velikim gradovima u početku je bilo pod nadzorom države, dok su vunu proizvodili privatnici. Trgovina nije bila, kao prije u Mezopotamiji, u državnim rukama već su se njom postupno sve više bavili trgovci koji su je i financirali. Posebice je bila razvijena vanjska odnosno međudržavna trgovina s pomoću plovidbe i karavanskog transporta. Najviše su se izvozili žito, ulje, vuna i obrtnički proizvodi, a uvozili su se kovine, drvo, kamenje, stoka za rasplod i robovi. Trgovačke transakcije obvezno su se sklapale pred svjedocima, a o poslu se sastavljalo i ispisivalo izvješće na glinenoj pločici.²⁷

Hamurabijev zakonik najvažnije je pravno djelo tog doba. Zakonik se sastoji od 282 članka (od kojih nisu svi sačuvani), ispisan je na stupu od crnog diorita visokom 2,62 m koji je pronađen 1901. u Suzi u Iranu a gdje je dospio kao ratni plijen u 12. st. pr. Kr. Danas se čuva u Louvreu. Napisan je klinastim pismom na akadskom jeziku. Sastoji se od tri dijela: u prvom dijelu Hamurabi opširno navodi svoju ulogu prema narodu koja je Bogom određena; u drugom dijelu su 228 članaka, a u trećem Hamurabi poziva na poštivanje zakona uz

monumentalne građevine, između ostalih navodno i Semiramidine viseće vrtove, u: E. Cravetto, I. Goldstein (gl. ur.), *Povijest*, 1. knjiga, Europapress holding, Zagreb, 2007., str. 605. – 618.

²⁶ U Mezopotamiji su mjere za težinu bile: *še* – zrno (0,0467 gr.), *šiklu* – šekel (8,416 gr.); *manu* – mina (505 gr.) i *bilu* – talent (30,500 kg) – G. Contenau, *Babilon i Asirija*, Naprijed, Zagreb, 1978., str. 80.

²⁷ Zanimljivo je zapažanje F. Brandela: „Svojevrsni „kapitalizam“ oduvijek postoji; postojao je čak i u starom Babilonu koji je imao svoje bankare, svoje trgovce koji su se upuštali u daleka putovanja i sva kreditna sredstva: mjenice, vlastite mjenice, čekove... U tom smislu povijest kapitalizma ide od Hamurabija do Rockefellera.“ – F. Brandel, *Civilizacije kroz povijest*, Globus, Zagreb, 1990., str. 331.

božansku zaštitu, te kletve i kazne onim koji zakonik ne priznaju. Hamurabijev zakonik nije prvi pisani izvor prava na ovom području, to je zbirka odredbi koje su prije njega uključene u Ur-Nammuov i Bilalanov zakonik, kao i Lipit-Ištarov zakonik vladara grada Isine i druge zakonike.²⁸ Međutim, Hamurabijev zakonik je najobuhvatniji i najopširniji dokument te vrste koji je glavni izvor spoznaja o starobabilonskom društvu i pravu. Zakonik sadrži odredbe iz statusnog, obligacijskog, obiteljskog, nasljednog i dr. prava. Pred zakonom su svi jednaki, ali Zakonik razlikuje tri društvene klase: slobodnjake, pripadnike dvora i robove. To je zakon odmazde po kojem se krivcu nanosilo isto zlo koje je on prethodno nanio oštećenom. Iz Starog zavjeta poznato načelo „oko za oko, zub za zub“²⁹ može se naći i u Hamurabijevu zakoniku.

Sadržaj Zakonika pokazuje da su u staroj Babiloniji postojali razvijeni gospodarski odnosi, te da je dominirala ideja neograničene državne intervencije u gospodarstvo i gospodarska kretanja. U vezi s odredbama koje se odnose na ekonomiju, odnosno na gospodarstvo i odnose sudionika u gospodarstvu, može se istaknuti sljedeće.

Hamurabijev zakonik štiti je dužnika od samovolje vjerovnika, pa se dužniku koji zbog propale ljetine nije mogao vratiti dug otplatni rok produžavao.²⁹ Zakonikom su propisane kamate,³⁰ a dužnik se štiti od obračuna

²⁸ Hamurabijev zakonik temelji se na starijim sumerskim i akadskim zakonima koje je Hamurabi preradio, prilagodio i proširio. – *The World Book Encyclopedia*, Volume 9, World Book, Inc., Chicago, 1994, str. 36.

Hamurabijev zakonik se, kao što je spomenuto, čuva u Louvreu, Ur-Nammuov u muzeju u Istanbulu, Bilalamov u muzeju u Bagdadu, a Lipit-Ištarov u muzeju u Philadelphiji.

²⁹ Čl. 98. „Ako netko pozajmi novac ili žito od trgovca i nemože vratiti žito ili novac, ali ima (druga) dobra, neka da trgovcu što mu stoji na raspolaganju i pred svjedocima potvrdi da će ih dati, trgovac treba da ih primi bez zamjerki.“ – prema: M. Višić, *isto djelo*, str. 130.

Prvi prijevod Hamurabijeva zakonika u Jugoslaviji na srpski jezik objavio je 1925. godine u Beogradu Čedomilj Marković: *Hamurabijev zakonik*, preveo Č. Marković, Beograd, 1925., dostupno na: www.ius.bg.ac.rs/drakitic/hamurabi.rtf, pristup: 14.8.2016.

³⁰ Čl. 88. „Ako trgovac daje žito pod kamatu, na ime kamate dobija 60 *qu* žita za *kur* (kako je *kur* sadržavao 300 *qu* kamatna stopa bila je 20%, op.a.). Ako pod kamatu daje novac, na ime kamate dobija šestinu (šekela) za šekel srebra.“ – prema: M. Višić, *isto djelo*, str. 129.

U Babiloniji je bio osobito značajan i zanimljiv tip zajma u žitu koji je registriran u brojnim ispravama. Sjeme za sjetvu žita pozajmljivalo se tako da je zajam izražen u onoj svoti novca koliko je isporučilo sjemensko žito u doba sjetve koju je dužnik trebao vratiti poslije žetve. Kako je cijena sjemenskog žita bila daleko viša od cijene žita poslije žetve vjerovnik je kod tako ugovorenog zajma redovito dobivao bar dvostruku količinu žita od one koju je pozajmio. Stoga se kod takvog tipa zajma nisu ugovarale kamate. V. Lunaček ističe da s gledišta razvoja ekonomske doktrine spomenuta koncepcija zajma u žitu podsjeća i daje dragocijen prilog argumentaciji teorije Böhm-Bawerka o kamata po vremenskoj razlici. – Vidite opširnije u: V. Lunaček, *isto djelo*, str. 42. – 43.

viših kamata.³¹ Jednako tako, Zakonikom je određeno učešće u dobiti ili gubitku u slučaju zajedničkog ulaganja, odnosno partnerstva.³²

Za vraćanje zajma jamči dužnik osobno (može završiti u ropstvu ako ne podmiri obveze) i svojim imetkom. U dužničkom ropstvu zbog nepodmirivanja duga mogu završiti dužnikova žena i djeca jer obitelj jamči za dug glave obitelji, no s ograničenjem da njihovo ropstvo prestaje poslije tri godine.³³

Za preračunavanje novčanih dugovanja u robna i obratno omjer, odnosno tečaj propisivao je kralj.³⁴ U slučaju obračunavanja višeg tečaja određivala se smrtna kazna, pa se tako gostioničarka kažnjava smrtnom kaznom ako za naplatu pića traži umjesto žita novac po višem tečaju od onog koji je propisao kralj.³⁵

U Babiloniji je u drugom tisućljeću pr. Kr. bila široko zastupljena djelatnost uskladištavanja žita s propisanom zakupninom.³⁶ U zakup se, osim kuća i zemlje, davala i stoka, te kola i brodovi za prijevoz s precizno propisanom zakupninom.³⁷

Hamurabijevim zakonikom bile su propisane nadnice poljoprivrednih i obrtnih radnika.³⁸ Za neke liječničke zahvate Zakonikom su bile propisane

³¹ Čl. 88. „Ako trgovac povisi kamatu (60 *qu*) za *kur* (žita) ili jednu šestinu (šekela) za šekel i to naplati, gubi sve što je dao pod kamatu.“

Čl. 94. „Ako trgovac daje pod kamatu žito ili novac pa kad daje pod kamatu žito i novac mjeri manjom mjerom a kad prima natrag mjeri većom mjerom, gubi sve što je dao pod kamatu.“

Prema: M. Višić, *isto djelo*, str. 129.

³² Čl. 98. „Ako čovjek da novac (drugom) čovjeku na ime zajedničkog ulaganja, obojica će pred Bogom nastalu dobit ili gubitak razdijeliti na jednake dijelove.“ – prema: *isto djelo*, str. 130.

³³ Čl. 117. „Ako čovjeku prisprije dug, ili je vezan jamstvom, pa u ropsku službu da svoju ženu, svoga sina ili kćer, tri će godine raditi u kući njihova kupca, ili njihova vjerovnika, a četvrtu godinu bit će slobodni“ – prema: *isto djelo*, str. 131.

³⁴ Čl. 51. „Ako nema novca da vrati, trgovcu će u visini pozajmljenog novca s kamatom dati žita ili sezama u skladu s kraljevom odredbom.“ – prema: *isto djelo*, str. 127.

³⁵ Čl. 108. „Ako gostioničarka za plaćanje pića ne prihvaća žito prema bruto težini ali uzima novac, a cijena pića je manja od cijene žita, bit će osuđena i bačena u vodu.“ – prema: *The Code of Hammurabi*, Translated by L. W. King, Paragraph 108, dostupno na: www.sacred-texts.com/ane/hamurabi.htm, pristup: 14.8.2016.

³⁶ Čl. 121. „Ako čovjek ostavi žito na čuvanje u kući (drugog) čovjeka, za godinu dana na ime zakupnine platit će mu pet *qu* žita za jedan *kur*.“ – prema: M. Višić, *isto djelo*, str. 132.

³⁷ Čl. 242. i 243. „Ako netko uzme govedo u zakup na godinu dana, vlasniku goveda dat će četiri *kura* žita na ime zakupnine za tegleće govedo, te tri *kura* žita na ime zakupnine za govedo prispjelo za jaram.“

Čl. 268. „Ako netko za vršidbu uzme u zakup vola, njegova zakupnina je dvadeset *qu* žita.“

Čl. 269. „Ako za vršidbu uzme u zakup magarca, njegova zakupnina je deset *qu* žita.“

Čl. 270. „Ako za vršidbu uzme u zakup kozu, njena zakupnina je jedan *qu* žita.“

Čl. 271. „Ako netko uzme u zakup volove, kola i goniča, dat će na dan 180 *qu* žita.“

Čl. 272. „Ako netko uzme u zakup samo kola, dat će na dan 40 *qu* žita.“

Čl. 275. „Ako netko uzme u zakup jedrenjak, njegova zakupnina je tri *še* na dan.“

Čl. 276. „Ako netko uzme u zakup brod na vesla, dat će na ime zakupnine dva i pola *še* srebra na dan.“

Čl. 277. „Ako netko uzme u zakup brod od 60 *kura* dat će na ime zakupnine šestinu šekela srebra na dan.“

Prema: *isto djelo*, str. 142. – 144.

³⁸ Čl. 257. „Ako netko unajmi zemljoradnika platit će mu godišnje osam *kura* žita.“

naknade - npr. cijena namještanja polomljene kosti bila je pet šekela srebra, dok je cijena operativnog zahvata na oku bila deset šekela srebra s tim da liječnik jamči za uspjeh zahvata, a u slučaju neuspjeha zahvata kažnjava se odsjecanjem ruka.³⁹

Jednako tako, zakonikom su bile određene novčane naknade za izgradnju broda,⁴⁰ kao i godišnje plaće za rad sa stokom.⁴¹

I na kraju, neke odredbe o djelatnostima trgovine i graditeljstva.

Trgovina se u vrijeme donošenja Hamurabijeva zakonika vršila pretežno u obliku principal - agent (trgovac - pomoćnik) odnosa. Ako agent koji je uzeo novac pod kamatu ne napravi nikakav posao, mora trgovcu vratiti dvostruki iznos pozajmljenog novca; ako je uzeo novac kao pomoćnik bez kamata, u slučaju neuspjeha treba trgovcu vratiti preuzetu glavniciu, ali ako je gubitak nastao višom silom, riješen je bez obveze ako prisegom dokaže da je gubitak nastao višom silom.⁴²

Hamurabijev zakonik uveo je red u graditeljstvo i strogo definirao prava graditelja (naknadu po jedinici površine), dužnost graditelja (čvrsta gradnja) i odgovornost graditelja (drastične kazne za rušenje građevine). Spomenuto regulira šest odredbi.⁴³

Čl. 273. „Ako netko unajmi nadničara, od početka godine do petog mjeseca dat će mu šest *še* srebra na dan, od šestog mjeseca do kraja godine dat će mu pet *še* srebra na dan.“

Čl. 274. „Ako netko unajmi obrtnika platit će mu na dan nadnicu od pet *še* srebra za lončara ..., pet *še* srebra za tkalca ..., četiri *še* srebra za tesara ...“ – prema: *isto djelo*, str. 144.

³⁹ Čl. 221. „Ako liječnik pacijentu namjesti polomljenu kost ili zaliječi oboljele tetive, pacijent će dati liječniku pet šekela srebra.“

Čl. 215. „Ako liječnik kirurškim nožem izvede teži operativni zahvat i spasi pacijentu život, ili kirurškim nožem spasi pacijentu oko primit će deset šekela srebra.“

Čl. 218. „Ako liječnik kirurškim zahvatom pacijentu napravi veliki rez i usmrti ga, ili kirurškim nožem otvori tumor i izreže pacijentu oko odrezat će mu se ruke.“

Prema: *isto djelo*, str. 140. – 141.

⁴⁰ Čl. 234. „Ako brodograditelj nekome sagradi brod od 60 *kura* dobit će pristojbu od dva šekela srebra.“ – prema: *isto djelo*, str. 141.

⁴¹ Čl. 258. „Ako netko unajmi goniča volova platit će mu godišnje šest *kura* žita.“

Čl. 261. „Ako netko unajmi pastira za goveda ili ovce platit će mu za godinu osam *kura* žita.“

Prema: *The Code of Hammurabi ...*

⁴² Čl. 101. „Ako tamo gdje ode ne ostvari dobit, pomoćnik trgovcu mora vratiti dvostruki iznos pozajmljenog novca.“

Čl. 102. „Ako trgovac pomoćniku da novac kao pomoć i tamo gdje ode doživi neuspjeh, trgovcu mora vratiti glavniciu.“

Čl. 103. „Ako mu kad krene na put neprijatelj uzme što je ponio, pomoćnik će se pred Bogom zakleti i nakon toga je slobodan.“

Prema: M. Višić, *isto djelo*, str. 130.

⁴³ Čl. 228. „Ako graditelj nekome izgradi kuću i dovrši je dat će mu se naknada od dva šekela za *sar* kuće (*gar* ili *sar* je mjera dužine i iznosi 4,752 m, a četvorni *sar* se naziva *musaru* i iznosi 22,58m² – op.a.).“

Čl. 229. „Ako graditelj nekome izgradi kuću, ne uradi je čvrsto pa se kuća sruši i ubije vlasnika, graditelja treba ubiti.“

Čl. 230. „Ako je izazvao smrt sina vlasnika kuće ubit će se sin graditelja.“

Čl. 231. „Ako je izazvao smrt roba vlasnika kuće, vlasniku kuće dat će roba za roba.“

U literaturi se ističe da su se prvi poznati zapisi o malom poduzeću pojavili prije 4.000 godina opisujući kako su bankari pozajmljivali novac uz kamatu. Poduzetništvo i malo poduzeće cvjetali su u Babiloniji, međutim njihovi proizvodi i usluge često su bili od loših materijala i slabe izrade. Potrošače se često varalo pa su mala poduzeća postala objekti prijezira. Upravo je Hamurabije u okviru svojeg Zakonika nastojao uvesti red u djelatnost graditeljstva zaštićujući s jedne strane poduzetnika, odnosno malo poduzeće propisujući visinu naknade za izvršeni posao, ali i potrošača, u ovom primjeru vlasnika kuće i njegovu obitelj od lošeg prizvoda.⁴⁴

5. ASIRIJA

Asirija je bila država u sjevernom dijelu Mezopotamije na području između planine Zagrosa, Kurdskog gorja i srednjeg toka Tigrisa. Prema današnjem zemljovidu, središnji dio Asirije nalazio se u Iraku, dok je šira Asirija obuhvaćala južnu Tursku i istočnu Siriju. Na vrhuncu moći Asirija je obuhvaćala Mezopotamiju, Siriju, Palestinu, Egipat i područja u Iranu, Armeniji i Anatoliji. Početci Asirije su u 3. tisućljeću pr. Kr. kad je u središnjoj Asiriji bilo nekoliko neovisnih gradova, a geografsko-politički subjekt postaje oko 2500 g. pr. Kr. s najvažnijim gradovima Ašur (po njemu je i nazvana) i Niniva. Stanovnici su bili mješavina Subarejaca (tj. stanovnika Subartua kako babilonski izvori označuju asirski prostor), Sumerana i babilonskih Semita, a jezik je bio dijalekt akadskog jezika.

Država Asur spominje se prvi put u 20. st. pr. Kr., i to na natpisu jedne građevine u Lušumi. Prva dinastija Pucurasur bila je akadskog podrijetla, a o počecima te dinastije malo se zna. Dinastiju Pucurasur oborio je 1815. g. pr. Kr. Šamšiadad kojeg je 1782. pr. Kr. zamijenio sin Išmedagon kao treći kralj Asirije. Hamurabi je 1755. pr. Kr. porazio Asiriju. Od tada do 15. st. pr. Kr. o Asiriji se malo zna („mračno doba“), vjerojatno je pripadala području vlasti huritskog kraljevstva Mitana, države koja je oko 150 godina bila važna politička sila na Bliskom istoku. Smrću mitanskog kralja Tušrate propada država Mitana, a počinje preporod samostalne Asirije i njezin uspon do velesile. Vodili su se vojni pohodi prema istoku i sjeveru s posebno okrutnim načinom vođenja bitki po čemu su Asirci postali poznati i ostali zabilježeni kao surovi vojnici koji su počinili brojna okrutna ubojstva i odvođenja u zarobljeništvo poslije pobjeda.⁴⁵

Čl. 232. „Ako uništi pokretnu imovinu, nadoknadit će se sve što je uništeno, a kuću koju je gradio pa je nije čvrsto izgradio zbog čega se srušila, ponovo će je izgraditi o svom trošku.“

Čl. 233. „Ako graditelj nekeke gradi kuću pa je dobro ne gradi i zid popusti, graditelj će zid čvrsto izgraditi o svom trošku.“

Prema: *isto djelo*, str. 141.

⁴⁴ Vidite u: N. C. Siropolis, *Menedžment malog poduzeća*, IV. izdanje, MATE, Zagreb, 1995., str. 6.

O odgovornosti prodavača u Babiloniji i zaštiti kupca vidite u: G. Contenau, *isto djelo*, str. 73.

⁴⁵ U Asiriji je stanovništvo bilo pozivano svake godine u vojsku na određeno vrijeme, a kasnije je uvedena stalna vojska i angažiranje stranih plaćenika. Vojska je imala vrlo jaku hijerarhijsku organizaciju i sastojala se od pješastva sa strijelčarima, te konjice i kočija što im je davalo veliku

Bili su ratnički narod koji je izgradio veliko carstvo na štetu moćnih susjednih zemalja. Tako je osvojena Babilonija, a Babilon je bio razoren i opljačkan. U vrijeme jednog od najznačajnijih asirijskih kraljeva Tiglat-Pilesera I. u 11. st. pr. Kr. Asirija se proširila od Sredozemnog mora do Babilona te je u kraljevstvo uključila čitavu Siriju i južnu Anatoliju. Nakon razdoblja stagnacije početkom prvog tisućljeća pr. Kr. ponovno kao novoasirsko carstvo postaju osvajačka sila koja je osvojila Damask, a u Gazi pobijedila egipatsku vojsku. U jednom od pohoda na Egipat 671. g. pr. Kr. osvojen je i egipatski glavni grad Memfis. Pod vodstvom kralja Asurbanipala 663. g. pr. Kr. u nekoliko pohoda na Egipat osim Memfisa osvojena je i Teba.

Za vrijeme vladavine Asurbanipala (668. – 627. g. pr. Kr.) Asirsko carstvo je u različitim aspektima doseglo vrhunac. Osim velikih građevinskih pothvata u Ninivi i drugim gradovima, Asurbanipal je formirao biblioteku pronađenu prilikom iskopavanja u Ninivi. Međutim, surova vladavina Asiraca poticala je nereda i česte pobune pokorenih naroda koje su vodile opadanju asirijske moći. Babilonci su sklopili savez s Medijcima te su 614. g. pr. Kr. osvojili grad Ašur, a 612. g. pr. Kr. nakon tri mjeseca opsade i grad Ninivu te ga u potpunosti razorili, čime je Asirska država prestala postojati.⁴⁶

Velika većina asirskog stanovništva živjela je u gradovima od kojih su najvažniji bili Ašur, Niniva, Arbela, Kalah i Haran. Procjenjuje se da je u Ninivi živjelo 120.000 stanovnika. Okolna plodna područja nisu bila dostatna da prehrane brojno stanovništvo u gradovima pa su vršena preseljavanja stanovništva u područja neobrađene zemlje. Središnja Asirija bila je u području sjeverne Mezopotamije, a to je područje redovitih padalina, pa navodnjavanje nije bilo problem. Tako su u središnjoj Asiriji temeljne djelatnosti bile poljoprivreda, stočarstvo i trgovina. S druge strane, kako je središnja Asirija bila zemljopisno smještena na raskrižju putova od istoka prema zapadu i od sjevera prema jugu, stanovnici Asirije su se od najranijeg razdoblja bavili trgovinom s drugim narodima. Za razliku od Babilonije, asirske rijeke nisu bile od velike važnosti u transportu, već su to bili kopneni putovi i karavane. Postojali su putovi koji su održavani, a u cilju bržeg transporta izgrađivane su postaje u kojim su odmorni konji bili na raspolaganju po cijeli dan. Na širem području Asirije kraljevi nisu pridavali važnosti razvoju gospodarstva, već je u prvom planu bilo ubiranje poreza, a takva politika je na kraju i dovela do pobuna, slabljena moći i propasti Asirije.

prednost u ratnim pohodima. Uz to, kako se raspolagalo rudnim bogatstvima, izrađivalo se kvalitetno oružje koje im je i s te strane osiguravalo premoć nad susjednim narodima. Asirska ratna strategija uz izravne bitke i opsade uključivala je i psihološki rat te preseljavanje stanovništva osvojenih područja.

⁴⁶ O starijem asirskom razdoblju (oko 1960. do 1400. pr. Kr.) i srednjem asirskom razdoblju (oko 1400. do 1000. pr. Kr.) vidite u: G. D. R. van Beest Holle et al., isto djelo, Drugi svezak, str. 609. – 618., a o novoasirskoj državi (884. do 612. g. pr. Kr.), njenim dostignućima i propadanju Asirije u: *Isto djelo*, Treći svezak, str. 1161. – 1187. i E. Cravetto, I. Goldstein (gl. ur.), *Isto djelo*, I. knjiga, str. 566. – 604.

Po društvenom uređenju u Asiriji je sva vlast bila u rukama kralja kao predstavnika boga Ašura na zemlji. Kralj je bio i vrhovni svećenik i vrhovni zapovjednik, jedini zakonodavac i vrhovni sudac. Bio je vlasnik sve asirske zemlje i kontrolirao je trgovinu. Utjecajnu ulogu imali su kraljevi namjesnici i pisari, a državna uprava bila je u službi vojske i osvajačke politike koju su provodili asirski kraljevi. Temeljna asirska društvena jedinica bila je pleme, a podjela na staleže bitno je uvjetovala moć, bogatstvo i društveni položaj pojedinca. Tako je, kao što je spomenuto, na vrhu bio kralj, zatim državni dužnosnici, pa velikaši, te obrtnici, a na dnu su bili neizučeni radnici koji su bili slobodnjaci ili robovi. Ropstvo nije u Asiriji bilo prošireno kao npr. u Rimskom Carstvu, tako da gospodarstvo nije ovisilo o robovskom radu, iako su robovi korišteni naročito u graditeljstvu. Postojale su dvije vrste robova – robovi dužnici i ratni zarobljenici. Kamate su bile visoke i zbog nemogućnosti podmirivanja obveza lako se postajalo robom. Robovi dužnici imali su povlastice pa su im ostavljene mogućnosti da vrate dugove i otkupe slobodu. Za razliku od njih, ratni zarobljenici nisu imali nikakva prava.

Gradovi i naselja sa stalnim stanovništvom plaćali su porez u zlatu i srebru, a seljaci u naturi. Vlasnici brodova koji su dolazili u Asiriju na dovezenu robu plaćali su carinu. Porezi su ubirani na temelju statističkih podataka koji su se sastavljali popisom stanovništva i imovine.

U vezi s asirskim pravnim sustavom može se istaknuti sljedeće. Iako je kralj bio vrhovni sudac u zemlji, većina parnica rješavala se na nižim razinama. Većina slučajeva rješavala se između sukobljenih stranki najčešće posredstvom trećeg objektivnog pojedinca (susjeda, npr.), a samo u rijetkim slučajevima parnicu je preuzimala državna uprava. Četiri glavne vrste asirskih pravnih dokumenata bili su dokumenti o vlasništvu, ugovori, računi i sudski zapisi. Dokumenti o vlasništvu odnosili su se na prenošenje vlasništva, te na iznajmljivanje, brak, usvajanje i nasljedstva. Ugovori su sadržavali obveze ugovornih strana, a posebice su se pravili ugovori o posudbi i najmu zemlje. Kamate su bile visoke, a neplaćanje je, kao što je spomenuto, moglo voditi u ropstvo. Računi o naplati duga bili su najrjeđi zakonski dokument. Sudski zapisi također su bili rijetki jer se većina parnica, kao što je gore spomenuto, rješavala na nižim razinama, a tek u nemogućnosti nalaženja rješenja slučaj je preuzimala državna uprava i tada je izrađivan službeni zapisnik o parnici. U Asiriji nije bilo stalnih zatvora. Na državnoj razini postojala je smrtna kazna za izdaju, dok se u slučajevima ubojstva i ranjavanja primjenjivala krvna osveta.

Asirsko pravo bilo je vrlo slično Sumerskom i Babilonskom pravu, samo što su kazne, općenito gledano, bile puno okrutnije. Asirski zakonici ispisani na tablicama iz vremena Tiglat-Pilesera I. pronađeni su prigodom iskopavanja ruševina grada Ašura 1903. – 1913. godine. Zakonici su dio sudskog zbornika u kojem se najveći broj članaka, odnosno paragrafa odnosi na obiteljsko pravo, a posebice na status žena koje su bile u neravnopravnom položaju u odnosu prema muškarcima. Žena nije imala gotovo nikakvih prava, slično položaju robinje nije mogla samostalno raspolagati imovinom, obavljati bilo kakve poslove, ovisila je

o ocu, mužu, sinu ili bratu, a smjela se baviti samo odgojem djece, kuhanjem i održavanjem kuće. Okrutno su se kažnjavali slučjevi preljuba,⁴⁷ uređivali su se statusni⁴⁸ i imovinski odnosi u braku.⁴⁹

U vezi s odredbama koje se odnose na gospodarstvo, odnosno na sudionike u gospodarstvu može se istaknuti sljedeće.

Zakonik propisuje proceduru koja se mora poduzimati kad se kupuje zemlja i kuća. Nažalost, početak i kraj vrlo zanimljivog teksta nedostaje, a prvi redovi su oštećeni. Ono što je ostalo propisuje da se prvo mora utvrditi je li zemlja koja je u pitanju, odnosno koja se namjerava kupiti, već prodana nekom drugom. U roku od mjesec dana pravni zastupnik, kojeg je angažirao kupac, tri puta u gradu Ašuru proglašava da se određena zemlja i kuća prodaju, te ima li prigovora na moguću kupoprodaju.⁵⁰ Ako kroz mjesec dana nitko ne dostavi i deponira dokumente koji bi spriječili kupoprodaju tada (nakon konačnog proglašavanja pravnog zastupnika u nazočnosti zamjenika tajnika kralja, gradskog bilježnika i zapisničara, te uz suglasnost gradonačelnika i tri magnata iz grada) kupac stječe u potpunosti cjelokupnu nekretninu.⁵¹

⁴⁷ A 13 „Ako udata žena napusti svoju kuću i posjeti muškarca u njegovom prebivalištu i on ima spolni odnos s njom znajući da je udata oboje se mora pogubiti.“

A 15 „Ako je muž zatekao svoju ženu s drugim čovjekom i ako su optuženi oboje moraju biti pogubljeni. Muž se ne smije smatrati odgovornim. ... ako muž izabere da pogubi svoju ženu tada se mora pogubiti i preljubnik. Ako, alternativno, muž odreže ženi nos preljubnika se mora kastrirati i osakati mu lice. Ali ako muž dopusti da se žena ne kazni, tada i preljubnika također treba osloboditi.“

Prema: *Middle Assyrian Law Code*, Tablet A, Based on a comparison of the translations of G. R. Driver, J. C. Miles, T. Meek, str. 3. (dostupno na: <http://jewishchristianlit.com/Texts/ANELaws/midAssyrLaws.html>), pristup: 3.3.2016.

⁴⁸ A 34 „Ako čovjek živi zajedno s udovicom dvije godine bez ugovora o braku ona postaje njegova žena; ona ne može otići.“ – *Isto djelo*, str. 6.

⁴⁹ I 35 „Ako žena udovica useli u kuću čovjeka što god donosi sa sobom postaje suprugovo. Ali ako se čovjek useli u ženinu kuću što god on donosi sa sobom postaje ženino.“

I 37 „Ako čovjek otpusti svoju ženu, ako želi može joj nešto dati; ako on to ne želi ne mora joj dati i ona će izići praznih ruku.“

Prema: *Ancient History Sourcebook: The Code of the Assura, c. 1075 BCE*, Fordham University, The Jesuit University of New York, str. 2. (dostupno na: <http://legacy.fordham.edu/halsall/ancient/1075assyriancode.asp>), pristup: 2.3.2016.

⁵⁰ Proglašavanje se vrši na sljedeći način.

III 1-50. „... Želim steći zemljište i kuću na teritoriju ovog grada koja pripada N. N. sinu N. N. Oni koji imaju žalbe i zahtjeve neka sastave svoje dokumente i neka ih deponiraju u prisustvu gradskog bilježnika i neka budu na raspolaganju ...“

Prema: K. Tallqvist, *Old Assyrian Laws*, Helsingfors 1921, Helsingfors Centraltryckeri (Oversikt av Finska Vetenskaps-Societetens Förhandlingar. Bd. LXIII. 1920-1921. Avd. B. N:o 3.), str. 38.

⁵¹ III 1-50. „... U ovom mjesecu pravni zastupnik obavio je tri puta proglašavanje i svatko tko nije donio i deponirao svoju dokumentaciju izgubio je pravo na zemlju i kuću: one su na raspolaganju onog koji je potakao proglašavanje.“ – *Isto djelo*, str. 38. – 39.

Zakonikom su posebice propisane kazne za slučajeve prisvajanja dijela susjedovog polja,⁵² neovlaštenog obrađivanja susjedovog polja,⁵³ te korištenja susjedove zemlje za proizvodnju cigle.⁵⁴

I na kraju, posebne odredbe odnosno paragrafi zakonika uređuju odnose u vrlo osjetljivoj problematici izgradnje rezervoara za navodnjavanje i njihovom korištenju. Polazi se od nepovredivosti vlasništva, te se razjašnjavaju odnosi u situaciji sporazumnog zajedničkog navodnjavanja, kao i u situaciji nepostojanja sklada između vlasnika, i to kad se voda kanalima doprema u rezervoar i u situaciji kad se rezervoar puni izvorskom vodom.⁵⁵

6. ZAKLJUČAK

U Mezopotamiji nije postojala sustavna ekonomska misao, a pojedine ekonomske ideje i misli moguće je sagledati kroz neke od odredbi zakonika koje su propisali vladari u Sumeru, Babiloniji i Asiriji. One su odraz toga vremena i daju uvid u gospodarstvo i gospodarske odnose u antičkoj Mezopotamiji u kojoj se pojedinim oblicima gospodarskog života izgradio poseban gospodarski sustav. Odredbe se većinom odnose na normativno utvrđivanje pojedinih aspekata tada

⁵² IV 11-19. „Ako netko prisvoji veliki dio susjedovog polja i ako se to dokaže i utvrdi dat će tri puta veće polje od onog kojeg je prisvojio; odrezat će mu se jedan prst, primit će 100 udaraca i mjesec dana radit će u kraljevoj službi.“

IV 20-28. „Ako netko prisvoji mali dio susjedovog polja i ako mu je krivnja dokazana, platit će jedan talent olova, vratiti tri puta više polja nego što je prisvojio, primit će 50 udaraca i radit će mjesec dana u kraljevoj službi.“

Isto djelo, str. 39.

⁵³ V 13-18. „Ako netko na polju svog susjeda priprema voćnjak, kopa i podiže stabla, a vlasnik polja to vidi i ne prosvjeduje, voćnjak je na raspolaganju onog tko ga je podigao. Vlasniku polja dat će se polje za polje (kompenzacija odgovarajućim dijelom drugog polja, op.a.).“

V 19-25. „Ako netko na zemlji koja mu ne pripada podiže voćnjak, kopa bunar, ili uzgaja povrće ili stabla i ako mu se dokaže krivnja, a vlasnik zemlje protestira, nakon pregleda polja može oduzeti voćnjak sa svim što je podignuto.“

Isto djelo, str. 40.

⁵⁴ V 26-33. „Ako netko na zemlji koja mu ne pripada koristi zemlju i peče cigle, te ako je proglašen krivim i osuđen, dat će tri puta veću površinu zemlje od one koju je koristio i cigle će mu se oduzeti. Primit će 50 udaraca i radit će mjesec dana u kraljevoj službi.“ – *Isto djelo*, str. 40.

⁵⁵ IV 29 ff. „Ako netko kopa bunar i pravi rezervoar na zemlji koja mu ne pripada, gubi pravo na bunar i spremnik. Primit će 30 udaraca i radit će 20 dana u kraljevoj službi.“ – *Isto djelo*, str. 39.

17. „Ako vlasnici susjednih polja prikupe vodu kanalom u rezervoar za navodnjavanje, vlasnici polja dijele vodu između sebe i svaki prema veličini svog polja navodnjava polje. Ali ako ne postoji sklad između vlasnika polja, suci pitaju svakog od njih o sporazumu između njih, poništavaju pisani sporazum između vlasnika polja a svaki vlasnik mora raditi svoj posao. Svaki mora sam crpiti vodu iz rezervoara i navodnjavati svoje polje, ali bilo čije drugo neće navodnjavati.“ Prema: M. Jastrow, Jr., *An Assyrian Law Code*, Journal of American Oriental Society, Vol 41, 1921, str. 57. – 58.

VI 2-20. „Ako skupljaju izvorsku vodu u rezervoar za navodnjavanje, vlasnici polja pomoći će jedan drugom i svak će sudjelovati u radu prema veličini svog polja i navodnjavat će ga. Ali ako ne postoji sklad između njih, svaki pita suce za posredovanje među njima, preuzima dokument (rješenje) od sudaca i radi svoj posao uzimajući vodu za svoje vlastite potrebe i navodnjava svoje polje, nitko drugi ne radi (ne pomaže mu op.a.).“ – K. Tallqvist, *isto djelo*, str. 40. – 41.; usp. sa: M. Jastrow, Jr., *isto djelo*, str. 58.

već, do izvjesnog stupnja, razvijenih i raščlanjenih gospodarskih odnosa s neograničenom državnom intervencijom u područje gospodarstva. Tu se mogu naći pojedine ekonomske ideje i misli koje su se odnosile na različita pitanja iz područja ekonomije, od zakupnina, nadnica, kamata do kvalitete proizvoda i zaštite potrošača.

Gospodarstvo je obilježavao prijelaz iz naturalnog u novčano, gdje su se plaćanja vršila dijelom u žitu i/ili ječmu, te dijelom u srebru. Tako je srebro kao robni novac preteča kasnijeg srebrenog novca kao opće prihvaćenog sredstva razmjene, odnosno sredstva plaćanja, čija je vrijednost bila opće priznata, a koji je bio neophodan za izravnavanje prometa odnosno kupoprodaje dobara u okviru pojedinih država i u međunarodnoj trgovini. Gradovi-države Sumera razvili su gospodarstvo koje se temeljilo na razvijenoj poljoprivredi i proizvodnji koja se odvijala u radionicama u različitim djelatnostima, a posebno mjesto i ulogu imala je unutarnja i vanjska trgovina, te uz nju i bankarstvo. Sve je manje ili više bilo normirano i propisano.

U ostacima prvog pisanog Ur-Nammuovog zakonika mogu se naći odredbe koje se odnose na praktično gospodarstvo, a posebice propisi koji uređuju odnose sudionika u obradi poljoprivrednog zemljišta. U Zakonima iz Ešnune, odnosno Bilalamovom zakoniku koji je po sadržaju sličan Ur-Nammuovom zakoniku posebice su normirane, tj. propisane zakupnine, nadnice i kamatna stopa.

Hamurabijev zakonik je najobuhvatniji i najopširniji izvor prava na području Mezopotamije koji sadrži odredbe iz statusnog, obligacijskog, obiteljskog, nasljednog i dr. prava. Temelji se na starijim sumerskim i akadskim zakonima koje je Hamurabi preradio, prilagodio i proširio. Iz domene odredbi koje se odnose na ekonomiju, odnosno gospodarstvo i odnose sudionika u gospodarstvu od posebnog su značaja one koje se odnose na kamate, zakupnine, nadnice poljoprivrednih radnika i obrtnika, cijene liječničkih zahvata, te propisivanja tečaja za preračunavanje novčanih dugovanja u robne i obratno. Također su od značaja odredbe koje su uvele red u djelatnost graditeljstva strogo definirajući prava, dužnosti i odgovornost graditelja, te zaštitu potrošača njihovog proizvoda.

Asirsko pravo bilo je slično sumerskom i babilonskom pravu, samo što su kazne bile okrutnije. Veći dio zakonika odnosi se na obiteljsko pravo, a od odredbi koje se odnose na gospodarstvo i sudionike u gospodarstvu od posebnog značaja su one koje propisuju proceduru kupovine zemlje i kuće, otimanje zemlje u proizvodnji, te odnose u izgradnji i korištenju rezervoara za navodnjavanje.

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**ECONOMIC THOUGHT IN ANCIENT
MESOPOTAMIA*****Abstract***

The paper explores and analyses the economic thought in ancient Mesopotamia, more precisely in Sumer, Babylonia and Assyria. Although there was no systematic economic thought in Mesopotamia, some economic ideas and thoughts can be found under certain provisions in the Code referring to economy, as well as in the legal arrangements of relations between participants in economy. Economic ideas and thoughts from the provisions of Ur-Nammu's Code, the Law of the Aquinas (Bilalam's Code), the Hamurabi Code, as well as the Assyrian Laws from the Tiglat-Pileser I are explored.

Keywords: economic thought, Mesopotamia, Sumer, Babylonia, Assyria, Code

JEL classification: B00, B11

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POVEZANOST OČEKIVANE PROIZVODNJE I POKAZATELJA POUZDANJA POTROŠAČA U PRERAĐIVAČKOJ INDUSTRIJI EUROPSKE UNIJE

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Sažetak

Ankete pouzdanja poduzeća i potrošača (engl. Business and Consumer Surveys, BCS) koriste se kao izvor podataka za ekonomske analize i prognoze. U dostupnim dosadašnjim istraživanjima ispitivana je povezanost varijabli i pokazatelja BCS-a, s jedne strane, i makroekonomskih varijabli, s druge strane. Poznato je da se temeljem kompozitnih pokazatelja BCS-a može predvidjeti smjer promjene referentnih makroekonomskih varijabli i do nekoliko mjeseci unaprijed. U ovom radu ispituje se povezanost ocjena i očekivanja potrošača s očekivanjima menadžera u prerađivačkoj industriji. U radu se ispituje hipoteza da su Pokazatelj pouzdanja potrošača (engl. Consumer Confidence Indicator, CCI) i očekivana proizvodnja menadžera (engl. Production Expectation, PE) pozitivno korelirane varijable. Pritom se ispituje može li CCI biti prethodeći pokazatelj PE-u. Istraživanje je provedeno za Europsku uniju (EU), Europodručje (EA) i Republiku Hrvatsku (RH). Uočeno je da su očekivanja i ocjene potrošača, (sažete u CCI) i PE od strane menadžera u prerađivačkoj industriji statistički značajno pozitivno visoko korelirane varijable i imaju približno isti smjer promjene u analiziranom vremenu te pokazuju sličnu osjetljivost na poremećaje u gospodarstvu.

Ključne riječi: ankete pouzdanja poduzeća i potrošača, Pokazatelj pouzdanja potrošača, očekivana proizvodnja, konfuzijska matrica, korelacija pomičnog okvira.

1. UVOD

Ankete pouzdanja poduzeća i potrošača (BCS) su, u osnovi, kvalitativna istraživanja koja se provode kontinuirano mjesečno u skladu s harmoniziranom metodologijom Europske komisije. Ankete pouzdanja poduzeća (BS) provode se na uzroku menadžera u četiri sektora: prerađivačka industrija, građevinarstvo, uslužni sektor i trgovina na malo, dok se ankete pouzdanja potrošača (CS) provode na uzorku potrošača. Varijable BCS-a su uglavnom kvalitativne varijable izražene kao ocjene i očekivanja menadžera i potrošača o prodajnim cijenama, stanju zaliha, narudžbama, proizvodnji, zaposlenosti, štednji i sl. Prema europskoj harmoniziranoj metodologiji, ove se ocjene i očekivanja odabranim statističko-analitičkim metodama prevode u numeričke pokazatelje.

BCS pokazatelji se uobičajeno koriste kao prethodeći (vodeći) ili koincidentni pokazatelji za više makroekonomskih varijabli kao što su bruto domaći proizvod (BDP), industrijska proizvodnja, prometu trgovini na malo, nezaposlenost, izvoz, cijene, štednja i dr. Ovaj rad se temelji na pionirskom empirijskom istraživanju prediktivnih svojstava rezultata anketa pouzdanja potrošača (CS) u ocjenjivanju i predviđanju promjena u očekivanjima menadžera. Za razliku od dosadašnjih istraživanja, ovdje se povezuju dva, po metodološkim osnovama, slična istraživanja s ciljem ispitivanja postoji li statistički značajna povezanost između ekonomskog sentimenta potrošača i očekivane proizvodnje menadžera u prerađivačkoj industriji. Nadalje, cilj je ispitati ima li ekonomski sentiment potrošača, mjeren CCI-em, svojstvo prethodećeg pokazatelja u predviđanju očekivanja menadžera, te ukoliko ima, za koje vrijeme prethodjenja se očituje to svojstvo?

Varijable u mjesečnim istraživanjima u prerađivačkoj industriji su: proizvodnja u prethodna tri mjeseca, očekivana proizvodnja u sljedeća tri mjeseca, ocjena ukupnih narudžbi, ocjena narudžbi iz inozemstva, ocjena zaliha gotovih proizvoda, očekivane prodajne cijene i zaposlenost tvrtke u sljedeća tri mjeseca. Varijable u mjesečnim istraživanjima potrošača su: financijska situacija u posljednjih dvanaest mjeseci, financijska situacija u sljedećih dvanaest mjeseci, opća ekonomska situacija u posljednjih dvanaest mjeseci, opća ekonomska situacija u sljedećih dvanaest mjeseci, trend cijena u proteklih dvanaest mjeseci, trend cijena u sljedećih dvanaest mjeseci, očekivana nezaposlenost u sljedećih dvanaest mjeseci, ostvarena kupnja, kupnja u sljedećih dvanaest mjeseci, štednja u sljedećih dvanaest mjeseci i ocjena financijske situacije kućanstva (European Commission, 2016).

Sve varijable u BS-u su uglavnom kvalitativne s približno istim načinom navođenja modaliteta („porast“, „nemijenjanje“, „smanje“, „više nego dovoljno“, „dovoljno“, „nedovoljno“ i sl.). Modaliteti varijabli u CS-u su: „značajno poboljšanje“, „malo poboljšanje“, „ne mijenjanje“, „malo pogoršanje“, „značajno pogoršanje“, „ne znam“ (European Commission, 1997; Čizmešija, 2008). Za svako pitanje (varijablu) u istraživanju, izračunava se saldo. Saldo je razlika ponderiranih relativnih frekvencija pozitivnih i negativnih odgovora na

postavljeno pitanje. Ponderacijski sustav se uglavnom primjenjuje u BS-u gdje su ponderi određeni brojem zaposlenih i/ili ukupnim prihodom tvrtke. Kako bi se rezultati istraživanja, izraženi kao salda, agregirali, izračunavaju se kompozitni pokazatelji. Prema europskoj harmoniziranoj metodologiji BCS-a (European Commission, 1997; European Commission, 2016) Pokazatelj pouzdanja potrošača (CCI) je jednostavna aritmetička sredina sezonski prilagođenih salda četiriju varijabli CS-a: financijska pozicija kućanstva, opća ekonomska situacija, očekivana nezaposlenost (sa suprotnim predznakom) i štednja u sljedećih dvanaest mjeseci.

Salda i pojedinačni pokazatelji pouzdanja, odnosno kompozitni pokazatelji koriste se u tumačenju i predviđanju promjena u gospodarstvu. Uvažavajući primarni kvalitativni karakter ovih istraživanja, naglasak je na praćenju i predviđanju, prije svega, smjera promjene referentne serije, a manje intenziteta njezine promjene. Pritom je važno ispitati ne samo povezanost između BCS pokazatelja i ostalih makroekonomskih varijabli, već i između ekonomskog raspoloženja menadžera i potrošača, odnosno između rezultata dvaju srodnih istraživanja provedenih na različitim jedinicama ispitivanja.

Istraživanje je provedeno u dva dijela, a rad je podijeljen u pet poglavlja. U prvom dijelu se prezentira teorijsko određenje BCS-a i pregled dosadašnjih istraživanja (prvo i drugo poglavlje rada). U drugom dijelu su dani rezultati empirijskog istraživanja, tumačenje istih te su izvedeni zaključci. S ciljem prezentiranja postojanja i karaktera povezanosti CCI-a i PE-a za različite pomake u vremenu (prethođenje) primijenjene su odabrane statističke metode, što je prikazano u trećem poglavlju rada. Smjer promjene varijabli od interesa za istraživanje analiziran je konfuzijskom matricom i konfuzijskim omjerom. Kako bi se ispitalo je li povezanost između analiziranih varijabli stabilna u analiziranom periodu, izračunani su koeficijenti korelacije pomičnog okvira. Empirijsko istraživanje provedeno je za EU u cjelini, za EA, te posebno za RH. Glavni rezultati i tumačenje istih dani su u četvrtom poglavlju rada, a zaključna razmatranja, ograničenja provedenog istraživanja i planovi za buduća istraživanja nalaze se u petom poglavlju.

2. PREGLED DOSADAŠNJIH ISTRAŽIVANJA

Poznato je da su BCS podaci u EU i EA, kao i u pojedinim zemljama članicama EU, korisni i često primjenjivi u makroekonomskim analizama i prognozama. Njihova prediktivna svojstva, posebno u predviđanju smjera promjene referentnih varijabli imaju vrlo važnu ulogu u kreiranju makroekonomske politike (Claveria, 2005; Gayer, 2005). Osim toga, ti su podaci raspoloživi u realnom vremenu, prije objave podataka o istim varijablama od strane službene statistike.

Veliki broj znanstvenika i istraživača fokusirao je svoja empirijska i teorijska istraživanja na utvrđivanje i mjerenje korelacije između ekonomske

osjetljivosti menadžera i potrošača s jedne strane, i gospodarskog okruženja s druge strane (Altin i Uysal, 2014; Gajewski, 2014; Mendicino i Punzi, 2013; Bruno, 2012 i dr.). Sveprisutna pitanja su: jesu li stvarni trendovi u gospodarstvu i ekonomska osjetljivost menadžera i potrošača međusobno povezani i može li se temeljem BCS podataka predviđati promjene u poslovnim ciklusima. U nastavku se ističu neka od novijih istraživanja teme od interesa.

Kuzmanovic i Sanfey (2013.) ispitivali su upotrebu rezultata anketa potrošača u predviđanju realnih varijabli u Hrvatskoj. Također, korištenjem europskih i američkih podataka, Ferreret et al. (2016.) ispitivali su ulogu CCI u predviđanju gospodarske stabilnosti. Uočili su, analizirajući dvanaest europskih zemalja, da povezanost između burzovnih kretanja i CCI-a postoji, ali da je znatno oslabila „pucanjem“ cjenovnog mjehura (engl. dot-com bubble).

Povjerenje potrošača i prinos na burzovnim tržištima istraživali su Salhin, A. et al. (2016). Zaključili su da povjerenje potrošača ne utječe na prinose na burzovnom tržištu. Povjerenje potrošača i rast potrošnje istraživali su Ng i Wright (2016). Koristili su se pokazateljima povjerenja potrošača i došli do zaključka da vijesti i najave o određenim makroekonomskim promjenama mogu dovesti do značajnih promjena u mjerama povjerenja potrošača.

Postojanje dugoročne povezanosti između pouzdanja potrošača i gospodarskog rasta u odabranim europskim zemljama empirijski su istraživali i Ul Islam i Mumtaz (2016.). Čizmešija i Erjavec (2016.) u svojem su radu analizirale mogućnost uporabe BCS pokazatelja u predviđanju vjerojatnosti ekspanzije u Hrvatskoj. Pozitivni predznaci procijenjenih parametara u ekonometrijskim modelima predlagali su da vjerojatnost ekspanzije raste s porastom vrijednosti pokazatelja.

U analizi odrednica inflacije osam novih članica EU koje još uvijek nisu članice Europskog područja, Globan et al. (2016.) su, između ostaloga, u empirijsko istraživanje uključili CS pitanje o očekivanoj inflaciji u sljedećoj godini.

Kurnoga i Čizmešija (2016.) analizirale su povezanost između povjerenja potrošača i uvjeta života. Temeljem odabranih varijabli CS-a izračunale su novi pokazatelj financijskih teškoća kućanstava i usporedile ga s odabranim mjerama Europske statistike o dohotku i uvjetima života (EU-SILC mjerama). Pokazale su da spomenuti CS pokazatelj ima vrlo sličnu krivulju kretanja kao i odbrane EU-SILC varijable, što znači da se ocjene i očekivanja potrošača čak mogu upotrijebiti kao proxy varijable odabranim varijablama u EU-SILC-u.

3. METODOLOGIJA

Empirijski dio istraživanja proveden je na mjesečnim sezonski prilagođenim podacima BCS-a za EU, EA i RH. Podaci za EU i EA odnose se na razdoblje od siječnja 1985. do srpnja 2016. godine, a za RH od svibnja 2008. do

srpnja 2016. Vremenski niz podataka za RH je kraći zato što se spomenuta istraživanja u RH nisu ranije provodila. Podaci su objavljeni na službenim internetskim stranicama Europske komisije (European Commission, 2017). Dvije varijable su uključene u modele: Pokazatelj povjerenja potrošača (CCI) kao kompozitni pokazatelj anketa pouzdanja potrošača i očekivana proizvodnja u prerađivačkoj industriji (PE) izražena kao saldo.

Za različito vrijeme prethodjenja CCI-a PE-u izračunani su koeficijenti korelacije i ispitana njihova statistička značajnost. Kako bi se ispitala stabilnost povezanosti između analiziranih varijabli u promatranom razdoblju, izračunani su koeficijenti korelacije pomičnog okvira (engl. *rollingwindow correlation coefficients*). Zbog primarno kvalitativnog karaktera BCS-a, u ispitivanju prediktivnog svojstva varijable i kompozitnog pokazatelja, naglasak je stavljen na uspješnost predviđanja smjera promjene. U tu svrhu korišteni su: konfuzijska matrica, konfuzijski omjer, omjer točnosti klasificiranja, pokazatelj osjetljivosti i pokazatelj specifičnosti (Hassouna et al., 2015).

Kako bi se ispitala pretpostavka o neovisnosti planiranog i ostvarenog smjera promjene PE-a primijenjen je Hi-kvadrat test neovisnosti kvalitativnih varijabli u tablici kontingencne. Naime, informacije o prognoziranim i ostvarenim promjenama smjera analizirane pojave u vremenu uobičajeno se zapisuju u konfuzijskoj matrici (engl. *confusion matrix*), kako je dano u tablici 1.

Tablica 1.

Konfuzijska matrica BCS-a (frekvencije izražene apsolutno)

Prognoza	Realizacija		Ukupno
	Porast	Smanjenje	
Porast	f_{uu}	f_{ud}	$f_{u.}$
Smanjenje	f_{du}	f_{dd}	$f_{d.}$
Ukupno	$f_{.u}$	$f_{.d}$	n

Izvor: Čižmešija i Sorić, 2016, str. 211.

Konfuzijska matrica služi za vizualizaciju informacija o klasifikaciji predviđenih i realiziranih promjena varijable i kao osnova za provjeru točnosti predviđanja smjera promjene. Uvažavajući osnovne karakteristike BCS-a, analiza konfuzijske matrice je jedna od najčešće korištenih metoda mjerenja uspješnosti predviđanja (Čižmešija i Sorić, 2016).

Elementi konfuzijske matrice tumače se na sljedeći način: f_{uu} - broj prognoziranih povećanja koja su se zaista i realizirala, f_{ud} - broj prognoziranih

povećanja i realiziranih smanjenja, f_{du} - broj prognoziranih smanjenja i realiziranih povećanja i f_{dd} - broj prognoziranih smanjenja koja su se i realizirala kao smanjenja. Frekvencije u marginalnom stupcu tablice su: $f_{.u}$ - ukupan broj prognoziranih povećanja i $f_{.d}$ - ukupan broj prognoziranih smanjenja. Analogno tome se tumače i frekvencije u marginalnom retku: $f_{.u}$ - ukupan broj realiziranih povećanja i $f_{.d}$ - ukupan broj realiziranih smanjenja analizirane pojave (varijable).

Elementi konfuzijske matrice na dijagonali (f_{uu} i f_{dd}) pokazuju ukupan broj uspješno prognoziranih promjena smjera varijable u uzorku veličine n . Proporcija uspješnih predviđanja smjera promjene varijable od interesa (u radu PE) naziva se omjer točnosti klasificiranja (engl. *Classification Accuracy Rate*, *CAR*) i izračunava se izrazom 1.

$$CAR = \frac{1}{n}(f_{uu} + f_{dd}) \quad (1)$$

Konfuzijski omjer (engl. *Confusion Rate*, *CR*) je proporcija neispravnih prognoza, odnosno relativni udio neispravnih prognoza u ukupnom broju opažanja n . Izračunava se izrazom 2.

$$CR = \frac{1}{n}(f_{ud} + f_{du}), \quad (2)$$

pri čemu je f_{ud} broj predviđenih porasta i realiziranih smanjenja dok je f_{du} broj predviđenih smanjenja i realiziranih porasta pojave. U oba primjera prognoza smjera nije ispravna.

Pokazatelj senzitivnosti (engl. *Sensitivity*) je relativni udio porasta varijable koji su bili uspješno predviđeni u ukupnom broju porasta promatrane varijable (izraz 3). Pokazatelj specifičnosti (engl. *Specificity*) je relativni udio smanjenja varijable koja su bila ispravno predviđena u ukupnom broju smanjenja (izraz 4).

$$Sensitivity = \frac{f_{uu}}{f_{.u}} \quad (3)$$

$$Specificity = \frac{f_{dd}}{f_{.d}} \quad (4)$$

Odgovarajuće vjerojatnosti utvrđene temeljem tablice 1, izražene kao relativne frekvencije proporcije, dane su u tablici 2.

Tablica 2.

Vjerojatnosti (proporcije) u konfuzijskoj matrici BCS-a

Prognoza	Realizacija		Ukupno
	Porast	Smanjenje	
Porast	p_{uu}	p_{ud}	$p_{u.}$
Smanjenje	p_{du}	p_{dd}	$p_{d.}$
Ukupno	$p_{.u}$	$p_{.d}$	1

Izvor: prema Čizmešija i Sorić, 2016, str. 211.

U tablici 2 p_{uu} je proporcija, odnosno relativni udio prognoziranih i ostvarenih porasta pojave u ukupnom broju opažanja, p_{ud} je proporcija prognoziranih porasta i realiziranih smanjenja, p_{du} je proporcija prognoziranih smanjenja i realiziranih porasta i p_{dd} je proporcija prognoziranih i realiziranih smanjenja pojave. Spomenute proporcije su zajedničke vjerojatnosti. Marginalni stupac tablice 2 sadrži proporcije prognoziranih povećanja ($p_{u.}$) i prognoziranih smanjenja ($p_{d.}$) pojave u ukupnom broju opažanja n . Marginalni redak sadrži proporcije realiziranih porasta ($p_{.u}$) i realiziranih smanjenja ($p_{.d}$) analizirane pojave u ukupnom broju opažanja n . Proporcije u marginalnom retku i marginalnom stupcu su marginalne vjerojatnosti.

Dvije su varijable u tablici kontingence nezavisne ako je zajednička vjerojatnost (u svakom pojedinačnom polju tablice) jednaka produktu pripadajućih marginalnih vjerojatnosti (McClave et al., 2014). Zaključivanje o povezanosti planiranih i realiziranih promjena smjera pojave, odnosno o uspješnosti prognoza provodi se na temelju rezultata Hi-kvadrat testa o nezavisnosti obilježja u tablici kontingence dimenzije 2x2 (Čizmešija i Sorić, 2016). Hipoteze testa dane su izrazom 5.

$$\begin{aligned}
 H_0 \dots p_{ij} &= p_{i.} \cdot p_{.j} \\
 H_1 \dots \exists p_{ij} &\neq p_{i.} \cdot p_{.j}, \quad \forall i, j
 \end{aligned}
 \tag{5}$$

pri čemu su $p_{ij}, p_{i.}, p_{.j}, i=1,2, j=1,2$ zajedničke vjerojatnosti (i, j), $i=1,2; j=1,2$ dvodimenzionalne slučajne varijable te marginalne vjerojatnosti u stupcu i u retku. Frekvencije koje se očekuju po nultoj hipotezi o nezavisnosti varijabli su očekivane frekvencije e_{ij} . Nulta hipoteza sadrži tvrdnju da su prognozirane i realizirane promjene smjera nezavisne, dok alternativna sadrži suprotnu tvrdnju da prognozirane i realizirane promjene smjera nisu nezavisne.

Test veličina je empirijski χ^2 koji se izračunava po izrazu 6.

$$\chi^2 = \sum_{i=1}^2 \sum_{j=1}^2 \frac{(f_{ij} - e_{ij})^2}{e_{ij}}, \quad (6)$$

pri čemu su e_{ij} očekivane frekvencije prema hipotezi o nezavisnosti prognoze i realizacije i izračunavaju se po izrazu 7.

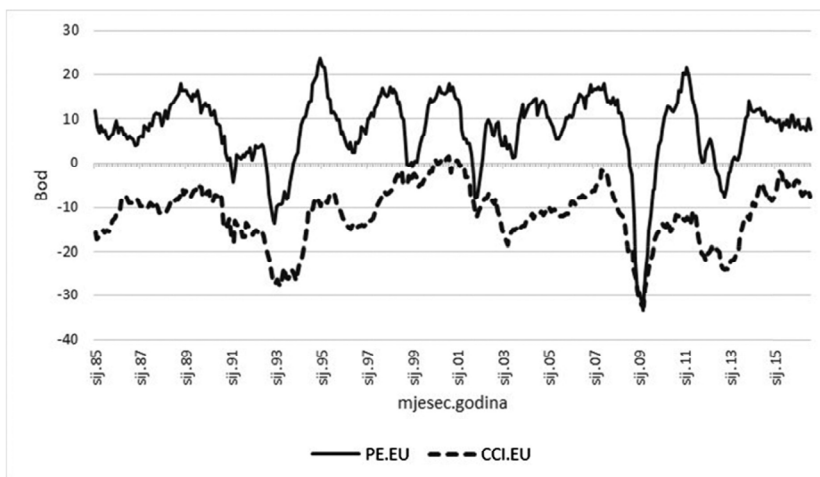
$$e_{ij} = \frac{f_{i.} \cdot f_{.j}}{n}, \quad i = 1, 2; \quad j = 1, 2 \quad (7)$$

Teorijska vrijednost χ^2 određuje se za razinu značajnosti testa α i za jedan stupanj slobode jer je $(r-1)(c-1) = (2-1)(2-1) = 1$, pri čemu je r - broj redaka i c - broj stupaca u tablici kontingence. Ona dijeli područje neodbacivanja nulte hipoteze od područja njezinog odbacivanja. Ako je empirijski χ^2 manji od teorijskog, nulta hipoteza se ne odbacuje. Isto se zaključuje ako je empirijska razina signifikantnosti (p -vrijednost) veća od teorijske razine signifikantnosti α .

Ako su prognozirane i realizirane promjene smjera analizirane varijable nezavisne, nije uputno koristiti odabrani model prognoziranja smjera promjene pojave jer on nije reprezentativan. U tom slučaju i konfuzijski omjer poprima relativno veliku vrijednost u odnosu prema omjeru uspješno provedenih prognoza.

4. RASPRAVA

Dinamika dviju analiziranih varijabli PE i CCI na razini EU u promatranom razdoblju od siječnja 1985. do srpnja 2016. godine prikazana je na slici 1.



Slika 1. PE i CCI u EU

Izvor: Izrada autorice po podacima na:
http://ec.europa.eu/economy_finance/db_indicators.

Lako se može uočiti da obje varijable imaju vrlo sličnu dinamiku kretanja. Najmanje vrijednosti objiju varijabli zabilježene su početkom 1993. i 2009. godine. Ako se ima na umu da BCS varijable i BCS pokazatelji imaju svojstvo predviđanja smjera kretanja referentnih serija (npr. industrijske proizvodnje, BDP-a i dr.) i ako se zna da se po promjenama BCS varijabli mogu ispravno predvidjeti promjene u makroekonomskim varijablama do šest mjeseci unaprijed, tada se zna da su male vrijednosti PE-a i CCI-a u 1993. i u 2009. godini signalizirale negativne trendove (recesiju) u europskoj ekonomiji, koji su se zaista i ostvarili.

Menadžeri i potrošači su uočili, odnosno ispravno predvidjeli, inflaciju uvođenjem Eura kao valute plaćanja u siječnju 1999. godine. Posebno teške godine bile su 2000. i 2001. Euro je bio relativno slaba valuta kroz sljedeće tri godine. Dakle, inflacija i recesija u EU ispravno su prepoznani, odnosno predviđeni temeljem podataka BCS-a.

Nasuprot tome, najveće vrijednosti PE-a i CCI-a mogu se uočiti 1995. i 2011. godine, što znači da je tada optimizam menadžera i potrošača bio dominantan, što je, uvažavajući prediktivna svojstva BCS pokazatelja, bio signal povoljnih kretanja sljedećih tri do šest mjeseci.

Koeficijenti korelacije između varijabli PE i CCI za različite vremenske pomake prikazani su u tablici 3. Može se uočiti da su spomenute dvije varijable pozitivno i najjače povezane u istom vremenu, bez prethodjenja. Koeficijent korelacije je 0.7264. Statistički je značajan na razini signifikantnosti 5 %. To znači da su očekivanja europskih menadžera o proizvodnji u sljedeća tri mjeseca i ocjene potrošača statistički značajno korelirane, odnosno da su PE i CCI koincidentni pokazatelji. Ovaj zaključak jednim je dijelom posljedica povezanosti analiziranih varijabli s ostalim makroekonomskim varijablama koje su utjecale na ponašanje menadžera i potrošača, ali je i potvrda kvalitete BCS-a i pouzdanosti tako dobivenih rezultata. Pritom treba imati na umu da su, kao što je već istaknuto, BCS podaci raspoloživi u stvarnom vremenu, prije podataka službene statistike što im dodatno povećava važnost uključivanja umakroekonomske analize i predviđanja.

Tablica 3.

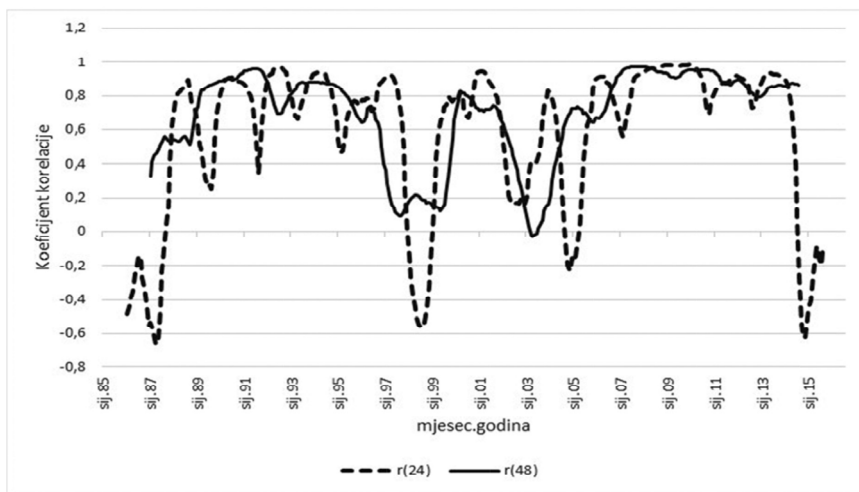
Koeficijenti korelacije između PE i CCI u Europskoj uniji

Varijabla	CCI(0)	CCI(-1)	CCI(-2)	CCI(-3)	CCI(-4)	CCI(-5)	CCI(-6)
Koeficijent korelacije	0.72604*	0.69982*	0.65521*	0.59877*	0.53830*	0.46937*	0.39464*
<i>p</i> -vrijednost	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Varijabla	CCI(-7)	CCI(-8)	CCI(-9)	CCI(-10)	CCI(-11)	CCI(-12)	
Koeficijent korelacije	0.32117*	0.24966*	0.17858*	0.10705*	0.04308	-0.01698	
<i>p</i> -vrijednost	0.00000	0.00000	0.00060	0.04040	0.41050	0.7457	

*Napomena: *signifikantno na razini 5% signifikantnosti*

Izvor: izračun autorice

Stabilnost povezanosti dviju analiziranih varijabli ispitana je koeficijentima korelacije pomičnog okvira. Centrirani dvogodišnji i četverogodišnji koeficijenti korelacije pomičnog okvira (24 i 48 opažanja) prikazani su na slici 2.



Slika 2. Koeficijenti korelacije pomičnog okvira između PE i CCI u EU

Izvor: Izrada autorice po podacima na:

http://ec.europa.eu/economy_finance/db_indicators

Uočava se da su koeficijenti korelacije između potrošačkih ocjena i očekivanja sažetih u CCI-u, s jedne strane i očekivane proizvodnje menadžera u prerađivačkoj industriji EU, s druge strane, relativno stabilni, pozitivni i na visokoj razini (oko 0.8) tijekom gotovo cijelog razdoblja promatranja. Nestabilnost je uočena kroz niže vrijednosti koeficijenata u razdobljima koja su istaknuta i na slici 1., kada su bili prisutni poremećaji u gospodarstvu kao što su inflacija, nedavna recesija i „pucanje“ cjenovnog mjehura (1998., 1999. i 2005. godine).

U tablici 4. dana je konfuzijska matrica broja realiziranih i predviđenih promjena PE na bazi promjena CCI (u istom vremenu, bez prethođenja) pošto su spomenute dvije varijable pozitivno, statistički značajno i najjače povezane u istom vremenu, bez prethođenja (kako je dano u tablici 3).

Tablica 4.

Konfuzijska matrica: PE i CCI (u istom vremenu)

Prognoza	Realizacija		Ukupno
	Porast	Smanjenje	
Porast	121 (0.34181)	66 (0.18644)	187 (0.52825)
Smanjenje	66 (0.18644)	101 (0.28531)	167 (0.47175)
Ukupno	187 (0.52825)	167 (0.47175)	354 (1.00000)

Napomena: U 24 primjera jedna od promjena je bila jednaka nuli. Ti slučajevi su isključeni iz analize. Proporcije (vjerojatnosti) su dane u zagradama.

Izvor: izračun autorice

Od ukupno 354 mjesečna opažanja, u 34,18 % slučajeva je, temeljem promjene CCI, predviđen i realiziran porast PE ($p_{uu}=0.34181$). Također je u 28,53 % slučajeva predviđeno i realizirano smanjenje PE-a ($p_{dd}=0.28531$). Promjene su predviđene i realizirane u istom vremenu.

Prema izrazima (1) i (2) izračunani su CAR i CR za različite pomake u vremenu. Rezultati su prikazani u tablici 5.

U najviše slučajeva, (63 %) smjer promjene očekivane proizvodnje (PE) bio je jednak kao i smjer promjene CCI u istom vremenu ($CAR(0)=0.62712$). Pokazatelj senzitivnosti (izračunan po izrazu 3) iznosi 0.6470665 što znači da je 65% svih porasta PE ispravno predviđeno porastom CCI u istom vremenu. Pokazatelj specifičnosti (izračunan po izrazu 4) je 0.60479 što znači da je 60% svih smanjenja PE ispravno predviđeno smanjenjem CCI. Dobiveni rezultati upućuju na zaključak da su ocjene i očekivanja potrošača izražene kroz CCI značajno povezane u istom vremenu, bez prethodjenja.

Tablica 5.

Omjer točnosti klasificiranja (CAR) i konfuzijski omjer (CR) u EU

Pomak	CAR	CR	Pomak	CAR	CR
0	0,62712	0,37288	7	0,51297	0,48703
1	0,56941	0,43059	8	0,47110	0,52890
2	0,60227	0,39773	9	0,53043	0,46957
3	0,52137	0,47863	10	0,47093	0,52907
4	0,56125	0,43875	11	0,46957	0,53043
5	0,53143	0,46857	12	0,47953	0,52047
6	0,48276	0,51724			

Izvor: izračun autorice

Kako bi se ranije doneseni zaključci dodatno potvrdili, proveden je Hi-kvadrat test o nezavisnosti varijabli u tablici kontingence (prema tablici 4). Budući da je empirijski Hi-kvadrat 22,45, a teorijski Hi-kvadrat, za jedan stupanj slobode i razinu signifikantnosti testa 5 % ($\alpha = 0,05$), iznosi 3,8146 ($\chi_{0,05}^2 = 3.8146$), nulta hipoteza o neovisnosti se odbacuje. Temeljem toga se može zaključiti da su predviđene (po CCI-u) i ostvarene promjene PE u Europskoj prerađivačkoj industriji zavisne varijable. Jednak zaključak donosi se temeljem empirijske razine signifikantnosti (p -vrijednosti) jer je p -vrijednost jednaka nuli ($p \approx 0,00$), odnosno kao takva je manja od teorijske razine signifikantnosti 0,05.

Istovrsna analiza provedena je za EA i RH. Koeficijenti korelacije između PE i CCI za EA dani su u tablici 6, a za RH u tablici 7.

Tablica 6.

Koeficijenti korelacije između PE i CCI u EA

Varijabla	CCI(0)	CCI(-1)	CCI(-2)	CCI(-3)	CCI(-4)	CCI(-5)	CCI(-6)
Koeficijent korelacije	0,75655*	0,72419*	0,67546*	0,61544*	0,55203*	0,48171*	0,40491*
p -vrijednost	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000
Varijabla	CCI(-7)	CCI(-8)	CCI(-9)	CCI(-10)	CCI(-11)	CCI(-12)	
Koeficijent korelacije	0,33003*	0,25725*	0,18651*	0,11485*	0,05112	-0,00751	
p -vrijednost	0,00000	0,00000	0,00030	0,02780	0,3288	0,88590	

*Napomena: *signifikantno na razini 5% signifikantnosti*

Izvor: izračun autorice

Tablica 7.

Koeficijenti korelacije između PE i CCI u RH

Varijabla	CCI(0)	CCI(-1)	CCI(-2)	CCI(-3)	CCI(-4)	CCI(-5)	CCI(-6)
Koeficijent korelacije	0,75279*	0,70294*	0,67618*	0,64012*	0,62600*	0,58910*	0,55372*
p -vrijednost	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000
Varijabla	CCI(-7)	CCI(-8)	CCI(-9)	CCI(-10)	CCI(-11)	CCI(-12)	
Koeficijent korelacije	0,47764*	0,38994*	0,31911*	0,25851*	0,20659	0,12122	
p -vrijednost	0,00000	0,00019	0,00259	0,01562	0,05488	0,26337	

*Napomena: *signifikantno na razini 5% signifikantnosti*

Izvor: izračun autorice

Zaključci su vrlo slični onima za EU. Najveći, statistički signifikantan, pozitivan koeficijent korelacije zabilježen je između PE i CCI u istom vremenu (bez prethodjenja). On za EA iznosi 0,75655, dok je isti za RH vrijednosti

0,75279. Budući da su koeficijenti korelacije najveći u istom vremenu (bez prethođenja) zaključuje se da su PE i CCI koincidentni pokazatelji i za EA i za RH.

5. ZAKLJUČAK

Veliki broj teorijskih istraživanja, temeljen na BCS podacima, usredotočen je na ispitivanje i analiziranje moguće povezanosti između BCS varijabli i/ili pokazatelja s ekonomskim i financijskim pokazateljima kao što su BDP, inflacija, burzovni pokazatelji, izvoz i dr. Mnoga od njih imaju važan znanstveni i stručni doprinos. Dobro je poznato da kompozitni pokazatelji BCS-a u prerađivačkoj industriji, u građevinarstvu, trgovini na malo, uslužnom sektoru i među potrošačima imaju prediktivna svojstva u predviđanju smjera promjene referentnih makroekonomskih varijabli s prethođenjem od nekoliko mjeseci. To znači da ekonomski sentiment potrošača i menadžera, izražen kao numerički pokazatelj, može uspješno biti uključen u ekonomske analize i prognoze.

Istraživanje provedeno u ovom radu je iskorak u objašnjenju povezanosti između ocjena i očekivanja potrošača i očekivanja menadžera u prerađivačkoj industriji u Europskoj uniji, Europodručju i u Hrvatskoj. Očekivana proizvodnja menadžera u prerađivačkoj industriji i potrošačke ocjene financijskog položaja kućanstva, opće gospodarske situacije, očekivane nezaposlenosti i štednje u sljedećih dvanaest mjeseci (prezentirane kroz CCI) su visoko, statistički značajno, pozitivno korelirane varijable u istom vremenu, bez prethođenja. Statistički test nezavisnosti varijabli u tablici kontingence pokazao je da su očekivanja menadžera i potrošački sentiment sinkronizirani. To su koincidentni pokazatelji. Povezanost ta dva fenomena je ipak slabija u razdobljima ekonomskih poremećaja kao što su inflacija, recesija i sl. Zato je hipoteza rada prihvaćena, a odgovori na ranije postavljena pitanja su sljedeći: Europski CCI i očekivanja menadžera o njihovoj industrijskoj proizvodnji su snažno pozitivno povezani. Pri tome je CCI koincidentni, ali ne i prethodeći pokazatelj očekivanoj proizvodnji u prerađivačkoj industriji. Jednako tako se može zaključiti da su ankete potrošača značajne ne samo za makroekonomske analize i prognoze, već i za poslovno odlučivanje i upravljanje.

Istraživanje provedeno u ovom radu primarno je usredotočeno na Europsku uniju i Europodručje kao agregatne razine. Istraživana su prognostička svojstva CCI-a u predviđanju očekivane proizvodnje u prerađivačkoj industriji, ali ne i očekivane proizvodnje menadžera u predviđanju promjena sentimenta potrošača. Ova ograničenja će se uzeti u razmatranje u sljedećim istraživanjima koja se planiraju provesti po pojedinim zemljama članicama EU (odvojeno). Osim toga, uključivanjem psiholoških karakteristika menadžera i potrošača u statističke modele osiguralo bi se preciznije praćenje, objašnjavanje i predviđanje promjena u nacionalnim ekonomijama, kao i na razini Europske unije i Europodručja.

Napomena: Rad je financirala Hrvatska zaklada za znanost projektom broj IP-11-2013-3858.

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**THE RELATIONSHIP BETWEEN EXPECTED
PRODUCTION AND CONSUMER CONFIDENCE
INDICATOR IN THE EUROPEAN UNION
MANUFACTURING INDUSTRY*****Abstract***

Business and Consumer Surveys (BCS) are used as data source in economic analyses and forecasts. In available previous researches the correlation between variables and BCS indicators on the one hand, and macroeconomic variables, on the other hand, are investigated. Based on BCS composite indicators, the direction of changes of relevant macroeconomic variables can be predicted, up to several months in advance. In this paper the correlation between consumers' assessments and expectations and managers' expectations in manufacturing industry are investigated. The hypothesis that there is a positive correlation between the Consumer Confidence Indicator (CCI) and expected production (PE) is also tested. It is therefore examined if the CCI can be a leading indicator to PE. The research is conducted for the European Union (EU), Euro area (EA) and for the Republic of Croatia (RH). It has been noted that the consumers' expectations and assessments (summarized in CCI) and PE by managers in the manufacturing industry are positively highly correlated variables and have approximately the same direction of changes in the analysed period and showed a similar sensitivity to disruptions in the economy.

Keywords: Business and consumer surveys, Consumer Confidence Indicator, expected production, confusion matrix, rolling window correlation

JEL classification: C53, E32, D12

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QUALITY MEASUREMENT IN RESTAURANT INDUSTRY FROM THE MARKETING PERSPECTIVE: A COMPARISON OF GUESTS' AND MANAGERS' QUALITY PERCEPTIONS

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Abstract

Restaurant quality management, as a fairly new area of research, requires frequent and critical academic monitoring. Previous studies have highlighted the importance of several quality attributes for the restaurant industry. However, up until now no study has compared both – restaurant managers' and guests' quality perceptions from the marketing mix (7P) perspective. This paper analyses differences in quality perceptions between managers and guests. Two samples – 207 valid questionnaires obtained by restaurant managers and 1998 questionnaires obtained by guests of the same facilities were analysed. Research results indicate that there are statistically significant differences between guests' and managers' quality perceptions. Factor analysis results show that according to both – managers and guests, by far the most important marketing quality attribute for ensuring restaurant quality is People, while other marketing quality attributes are significantly less/or not important. This research has thrown up many questions in need of further investigation. It is suggested that future research focus to other sectors of tourism industry.

Keywords: *Restaurant quality, quality management, marketing attributes, guests, managers*

1. INTRODUCTION

In the highly competitive restaurant industry, satisfying guests is the critical objective of all businesses. A crucial challenge to all restaurant managers is how to provide proper quality offer. There are several industry specific attributes that significantly affect the level of overall service quality (e.g. volatile demand, small and mostly family run businesses, vast selection of products offered, intangibility of services, labour – intensive production, intense competition etc.). In order to gain an advantageous edge in this highly competitive environment, the marketing literature has consistently emphasized the importance of marketing orientation as a strategic tool. The growing recognition of the customer – based marketing approach has suggested that implementing quality as a marketing tool is the essential element in fostering customer relationships and sustainable market share (Sedmak, 2011; Ryu and Lee, 2017; Wang, Law, Hung and Guillet, 2014). Understanding customers' needs and expectations is the first step in delivering quality services. The best way to manage customers' expectations is to find out what their needs and wants are, strategize how to meet them and implement these strategies in practice. In the scientific literature, there are several theoretical models to explore customers' expectations and assess service quality. After the implementation of the Conceptual Model of Service Quality (also referred as the five gaps model) and the SERVQUAL instrument by Parasuraman, Zeithaml and Berry in 1985, the issue of restaurant service quality has received considerable critical attention. Several attempts have been made (Kim, Ng and Kim, 2009; Sulek and Hensley, 2004; Vanniarajan, 2009) to improve and develop specific quality measurement techniques suited to the needs of the restaurant industry (measurement tools are presented in chapter 2.1.1). All of these techniques focus on specific aspects of service delivery such as food, environment, cleanliness perception etc. (Ayeh and Chen, 2013; Barber, Goodman and Goh, 2011; Han, Back and Barrett, 2010; Mosavi and Ghaedi, 2012; Voon, 2012) and are based on the theoretical concept of the generic Service quality model. According to the Model, the gap between customers' expectations and managers' perceptions of those expectations will have a major impact on the customers' evaluation of service quality. The first step in ensuring restaurant service quality is therefore to avoid discrepancies between managers' perceptions and guests' expectations. Only a good knowledge of guests' expectations might result in managers' more realistic perceptions about actual and desired quality offerings.

Nevertheless, only a few studies (Briggs, Sutherland and Drummond, 2007; Lau, Akbar and Fie, 2005; Nasution and Mavondo, 2008; Wilkins, Merrilees and Herrington, 2007; Yavas and Rezayat, 2003) investigated managers' perceptions of restaurant quality offerings. Based on a thorough literature review we couldn't reliably determine if there are statistically significant differences in restaurant quality perceptions between restaurant managers and guests. The purpose of this paper is therefore to investigate and compare differences in quality perceptions of individual marketing quality

attributes (7P) from the managers' and guests' perspective. Restaurant managers must understand what features connote high quality to their guests in order to deliver high quality offerings.

To fill this research gap, the current study focuses on seven marketing attributes that, according to Kotler (2004), form the fundamental part of restaurant offerings. The goal of this article is to empirically investigate differences in marketing quality perceptions (7P) between restaurant managers and their guests. We therefore hypothesize (H1) that there are statistically significant differences in quality perceptions between guests and restaurant managers.

As no previous study analysed and compared guests' and managers' quality perceptions from the marketing perspective the development of a research instrument was presented. In the second part of the study the instrument (questionnaire) was empirically tested. The overall structure of the study consists of five chapters, including this introductory chapter. Chapter two begins by laying out the theoretical dimensions. Chapter three is concerned with research methodology. In chapter four results are presented and discussed and finally, conclusions presented in the last chapter give a brief summary and critique of the findings.

2. LITERATURE REVIEW

2.1 Service quality

Defining service quality requires a specific approach to quality measurement, as it is not based on general objectivity and measurability. The approach from the standpoint of the customer is based on a highly subjective perspective. While a variety of definitions have been suggested (Grönroos, 1984, 1990; Langer, 1997; Parasuraman, Zeithaml and Berry, 1988; Reeves and Bednar, 1995), this paper is based on the definition suggested by Parasuraman, Zeithaml and Berry (1985), who defined service quality as the ability of a service to fulfil and exceed guests' expectations. The common characteristic of all service quality definitions (Parasuraman, Zeithaml and Berry, 1988; Reeves and Bednar, 1995; Ryu and Jang, 2007; Van Vaerenbergh, Larivière and Vermeir, 2012) is the consumer – based concept. This makes service quality a highly subjective and relative phenomenon that differs based on who is judging the quality and which specific quality indicators (logically merged into different attributes) were used to assess service quality. In our study, specific marketing attributes involved in the marketing mix (7P) were used as key quality indicators.

A large and growing body of scientific literature has investigated the theoretical concept of service quality. Several attempts have been made to capture the essential characteristics of service quality in different theoretical models. These models are especially important because they provide a theoretical basis

for various techniques (tools) for measuring service quality. The American school (Parasuraman, Berry and Zeithaml, 1993; Parasuraman, Zeithaml and Berry, 1994) is mainly focused on identifying the criteria that consumers use in evaluating the quality of services. Researchers have contributed a five-step model of service quality and an instrument for measuring service quality – the SERVQUAL instrument – in which they defined five dimensions of service quality: Reliability, Assurance, Tangibles, Empathy, and Responsiveness (also referred to as the RATER dimensions). Meanwhile, researchers from the Scandinavian school (Grönroos, 1990; Lehtinen and Lehtinen, 1991) have identified two major aspects of service quality: technical quality (the tangible aspect) and functional quality. Drawing on an extensive range of sources, the scholars (Candido and Morris 2000; Lin, Chan and Tsai, 2009) used various methods in an attempt to create valid and overall-service quality models. Candido and Morris (2000) defined a new model with 14 steps, but an in-depth analysis revealed that the model is mainly based on the five-step model. Overall, none of these modified models received a significant scientific validation. Conversely, several authors highlighted the need to break the link between the traditional American and Scandinavian schools and proposed alternative quality models. Lin, Chan and Tsai (2009) upgraded the traditional IPA (Importance Performance Analysis) model and developed a new model called IPGA. The IPGA model is designed to optimize the use of production resources with the aim of improving the quality of services offered. Kukanja, Gomezelj Omerzel and Kodrič (2016) stressed the importance of a marketing approach, while Ryu and Lee (2017) emphasized the perspective of a relationship based on provider's marketing investment. Nevertheless, all these studies highlight the need for future development of service quality management.

2.1.1. Techniques for measuring service quality

In our study, we have focused on techniques that collect quality information based on pre-determined quantitative standards (research instruments), although the customers' feedback can also be obtained by a number of qualitative approaches (e.g. spontaneous observations of guests' reactions, conversations with guests and employees, following guests' comments and reviews posted on internet etc.). According to Uran Maravić, Gračan and Zadel (2014) restaurant quality can be measured through different approaches, such as: external experts' evaluation (e.g. Michelin, Gault Millau and AAA Diamonds); guests' comments and reviews posted on different web pages (e.g. Yelp, Zagat or Trip Advisor); reviews performed by journalists (culinary critics) and/or academics (researchers). Despite the unquestionable significance of qualitative techniques, in our study we have decided to use the academic approach. Different academic techniques (also referred to as models) measure service quality basing on the quality gaps that occur as a result of differences between guests' expectations and perceptions (e.g. SERVQUAL, DINESERV); some are one-dimensional and focus solely on service performance evaluation (e.g.

SERVPERF, Dineserv.per); some combine quality and importance measurement of different service factors (SERVIMPERF); and finally some focus on employees' responses to specific critical situations (the Critical Incident Technique – CIT). According to Marković, Raspor and Šegarić (2012) the predominant quantitative measurement technique is the SERVQUAL instrument, which measures quality basing on the gap between guests' expectations and perceptions. According to Aigbedo and Parameswaran (2004), all five RATER dimensions of the SERVQUAL instrument have not yet been fully validated. Therefore, the authors propose additional metrics that would better explain the gap between expectations and perceptions. Other authors (Jensen and Hansen, 2007; Ryu, 2005) have highlighted the need for a tailored academic approach to service quality measurement. Kukanja (2015) analysed the inclusion of different quality dimensions in restaurant quality models. According to author (ibid.), some specific state of the art techniques (e.g. Tangserv, CIERM, CIT) have moved away from the traditional RATER dimensions of the SERVQUAL instrument, which indicates the necessity of further quality management investigation in the restaurant industry.

2.2 Management perception of quality offerings

There are relatively few studies examining the management perception of quality. Wilkins, Merrilees and Herrington (2007) and Nasution and Mavondo (2008) found that researchers have not considered business executives' quality perceptions as a prerequisite for high quality service delivery. This view is also consistent with previous studies in the service sector (Briggs, Sutherland and Drummond, 2007; Lau, Akbar and Fie, 2005), which suggest that managers may not always understand what customers really expect and consequently they misperceive and misevaluate company's quality offerings. In an international study conducted by Yavas and Rezayat (2003), authors found that management quality perceptions are mainly conditioned with managers' individual (cultural) characteristics and organizational characteristics of firms. In another major study, Wilkins, Merrilees and Herrington (2007) found that managers of luxury hotel properties in Australia do not perceive quality as a multidimensional construct and simplify the meaning of the service quality management. According to Lau, Akbar and Fie (2005) and Dedeoğlu and Demirer (2015) service companies must constantly monitor guests' expectations and compare them to executive managers' quality perceptions. Kukanja (2015) analysed restaurant managers' quality perceptions. According to author (ibid.) the quality of service staff significantly influences managers' quality perceptions. As noted by and Martínez-Tur, et al. (2011) balancing differences between customers' and managers' quality perceptions should be the key part of each business strategy. In the case of the Slovenian hotel industry the study by Uran (2003) offers the most comprehensive empirical analysis of the internal (organizational) gaps in delivering service quality. According to author (ibid.), due to internal organizational gaps, quality management cannot be used as a strategy of differentiation in hotel industry.

3 RESEARCH METHODOLOGY

3.1 Research process and samples description

Following the conceptualization and operationalization of the service quality construct, a 35-item instrument for assessing restaurant quality was formulated and empirically tested, as previously done by Kukanja, Gomezelj Omerzel and Kodrič (2016). Although in many questionnaires (Marković, Raspor and Šegarić, 2012) individual quality indicators are substantively combined to express several quality characteristics in a single, uniform quality indicator, in our study we have exclusively used one quality characteristic for the description of each quality indicator (see Table 1). The level of respondents' perceptions was measured on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire is based on the performance (referred to as the performance – only) aspect of quality measurement (Abdullah and Rozario, 2009; Keith and Simmers, 2011). This means that guests completed the questionnaire only after the service encounter, while managers filled out the questionnaire regardless to guests' feedback. The questionnaire was pretested on five restaurant managers who were invited to participate in the formation of the research instrument. Based on their suggestions, some minor changes were made. Our study was conducted from January to June 2015. The research was performed by ten interviewers in different restaurant settings in Slovenia. A total of 332 independently operated restaurants were included in the study, representing 10% of the population. The research was conducted by direct interviews with restaurant managers (one manager per restaurant) and their guests (ten guests per restaurant) in randomly selected restaurants. Managers were kindly asked to fill in the questionnaire. According to surveyors some managers refused to participate in the study for a variety of reasons. The final analysis is therefore based on 207 valid managers' questionnaires, representing 6.2% of the population in the country. After interviewing the manager, ten randomly chosen guests in each restaurant were kindly asked to fill in the questionnaire. Out of a total of 2007 collected questionnaires, the final guests' analysis is based on 1998 valid questionnaires. All questionnaires were sequentially numbered, in order that each manager's questionnaire corresponds to (ten) guests' responses.

In the first step, descriptive statistics analysis was used to analyse respondents' demographic characteristics. The majority of managers were an average of slightly less than 40 years of age (39 years), and the sample was composed of the vast majority of male managers (69.4%). The largest proportion of managers has completed one of the programs or vocational secondary education (59.2%), while the higher education acquired 40% of managers. Despite the overwhelmingly proportion of managers with lower levels of education we have found that they have a relatively large amount of work experience in the industry, with an average of 19.2 years. Next, guests' demographic profile was analysed. Interestingly, the majority of guests were also an average of slightly less than 40 years of age (39.6 years), and the sample was composed of almost equal numbers of male (49.4%) and female respondents (50.6%). The highest

number of guests had completed secondary education (47.2%), while 41.5% of guests had acquired a high school education, 4.9% had only finished elementary school, and 6.3% had obtained a Master's degree or PhD.

3.2. Research instrument development

A relatively small number of studies focusing on managers' perceptions meant (see chapter 2.2) that we primarily had to base on studies which analysed customers' quality perceptions from various marketing perspectives. Results from several studies presented below emphasize the importance of different quality attributes. Nevertheless, no study before has compared managers' and guests' quality perceptions from the marketing perspective.

3.2.1. Product

Numerous studies have reported that food is undoubtedly the most important quality attribute in restaurant offering (Gupta, McLaughlin and Gomez, 2007; Kim, Ng and Kim, 2009; Sulek and Hensley, 2004; Vanniarajan, 2009). Sulek and Hensley (2004) proposed that the quality of food should be simply defined by three key quality indicators: food safety, attractiveness, and digestibility. Sedmak (2011) highlighted the importance of food selection, while Namkung and Jang (2007) stressed the importance of appearance and taste. Based on presented studies, we used the following quality indicators (marked as I) in our questionnaire: (I1) offer volume – selection of dishes; (I2) size of portions; (I3) taste; (I4) appearance; (I5) perception of food safety.

3.2.2. People

A large volume of studies (Andaleeb and Conway, 2006; Jaafar, Lumbers and Eves, 2008; Mosavi and Ghaedi 2012; Voon, 2012) describe the role of people as the most important quality attribute. Several researchers (Luohe and Tsaur, 2011; Martínez-Tur, Tordera, Peiró, and Potocnik, 2011) confirmed the correlation between guests' quality evaluation process and demographic profile of employees', while Wall and Berry (2007) concluded that guests' quality perceptions heavily depend on the type of restaurant itself. A study conducted by Waxman (2006) not only stressed the significance of staff's attitude but also revealed the importance of their social competencies (e.g. sense of altruism, warmth, understanding etc.). The importance of people (staff) was also highlighted by Kukanja, Gomezelj Omerzel and Kodrič (2016). The design of our questionnaire has been based on the results of the presented studies, and some quality indicators were logically introduced from the SERVQUAL instrument (employees' politeness), DINESERV model (well-trained, competent and experienced staff; number of staff) and the Tangserv questionnaire (customers' interactions with other guests). Indicators that have been introduced to our questionnaire are: (I6) hospitality of staff; (I7) professional competencies; (I8) sufficient number of staff; (I9) importance of the presence of the restaurant manager; (I10) distracting presence of other guests.

3.2.3. Price

Assessment of quality is particularly problematic in terms of individual price perception. According to Kim and Kachersky (2006) the perceived price level is the result of a personal psychological process. This view is also supported by Meng and Elliott (2008) who stressed the importance of individualism in price perception. According to authors (*ibid.*), especially the “fair price” perception significantly influences guests’ overall quality perception. We have noted, that price was not identified as the most important quality attribute in any of the presented studies. Nevertheless, several studies stressed the importance of different individual price indicators (e.g., an accurate bill is also a quality indicator in the DINESERV model). Following the above discussion, we may suppose that price perception can be measured based on the following indicators: (I11) understandability of prices; (I12) bill accuracy; (I13) value for money; (I14) price competitiveness; (I15) expected price level vs. actual price level.

3.2.4. Processes

The quality of this attribute is most often assessed according to different activities of service staff. Ha and Jang (2010) have primarily treated the quality of the service encounter as a multidimensional construct, which is most often the result of guests’ subjective evaluation of different service activities (e.g. the process of welcoming guests, acceptance of orders etc.). Heung, Wong, and Qu (2000) reported that the speed of service is the most important element in determining guests’ perception of quality. Conversely, Nam, Ekinci and Whyatt (2011) state that it still remains unknown which service activities actually influence guests’ overall quality perceptions. Based on the literature review, the following quality indicators were included in our study: (I16) staff responsiveness to questions; (I17) staff helpfulness in serving guests’ needs; (I18) staff responsiveness, (I19) restaurant working hours; (I20) waiting time.

3.2.5. Physical evidence

The importance of the physical – tangible environment (also referred to as the servicescape) has been stressed by several authors (Cheng, et al., 2012; Kim and Moon, 2009; Ryu and Jang, 2007). According to Barber and Scarcelli (2010) especially factors associated with cleanliness and noise significantly influence guests’ perception of restaurant quality. The design of our questionnaire has been based on the results of the presented studies, and some quality indicators were logically introduced from the SERVQUAL instrument and the DINESERV model (neat and presentable staff); Tangserv (design in accordance with food offering and sense of security); and the SERVPERF questionnaire (cleanliness and visual appearance). Based on findings presented in this section the following quality indicators were included in our questionnaire: (I21) cleanliness of the premises; (I22) neat and presentable staff, (I23) comfort; (I24) design in accordance with food offering; (I25) sense of security.

3.2.6. Promotion

According to Sedmak (2011) direct sales present the only form of promotion that provides instant feedback from guests. The success of direct (personal) sales heavily depends on competences, professionalism and charisma of service staff. Aside from the functional aspect of quality, which heavily depends on staff's recommendations and guests' promotional activities (e.g., word of mouth), the quality this attribute is also perceived through the quality of different technical elements, such as menu design, outdoor sign boards, leaflets and wine lists (Din, et al., 2012). Taylor and Long-Tolbert (2002) found that discounts and special offers (e.g. happy hours) also influence guests' quality perceptions. In light of the evidence presented in this section, the following quality indicators were included in our questionnaire: (I26) visible marketing signs; (I27) signs of special attention and compliments; (I28) service staff recommendations; (I29) special offers; (I30) advertising activities in media.

3.2.7. Placement

In restaurant industry, channels of distribution are most often direct – personal. Sedmak (2011) states that other important channels of distribution are geographical location and indirect distribution through travel agencies and other providers. The importance of location was also emphasized by Bowie and Buttle (2004), and Parsa, et al. (2011). We have decided to include the following indicators in our study (tangible indicators were logically introduced from the Tangserv questionnaire): (I31) entrance accessibility; (I32) accessible parking areas; (I33) neat and clean surroundings; (I34) perception of whether the restaurant is worth the distance travelled; (I35) indirect distribution.

4. RESULTS AND DISCUSSION

The next section of the survey was concerned with the evaluation of perceived quality. Results presented in table below (Table 1) show that both groups of respondents (guests and managers) evaluated all marketing quality attributes relatively highly. The average mean value for managers' perceptions is 4.24. Among the seven quality attributes, the highest-rated attribute was product (mean value 4.72), with food safety as the highest rated indicator (4.89). Results indicate that the lowest perceptions are related to attribute promotion (mean value 3.86), with the lowest scores related to indicator I29 – special offers (2.83).

Evaluation of guests' responses show that the average mean value of their perceptions is slightly lower (3.98) in comparison to managers' feedback. Among the seven quality attributes, the highest-rated dimension was also product (mean value 4.34), with I5 – food safety as its highest rated indicator (4.47). Interestingly, the lowest guests' perceptions are also related to the attribute promotion (mean value 3.57), with the lowest scores related to indicator I30 – advertising in social media (2.95).

Table 1.

Quality assessment – descriptive statistics

Quality attributes	Mean		Coefficient of variation (%)	
	Guests' perceptions	Managers' perceptions	Guests' perceptions	Managers' perceptions
Product				
I1	4.26	4.58	18.64	13.78
I2	4.27	4.75	19.11	10.61
I3	4.35	4.80	17.70	9.58
I4	4.28	4.58	18.88	13.47
I5	4.47	4.89	16.82	7.77
People				
I6	4.26	4.68	20.52	11.86
I7	4.13	4.50	21.84	14.98
I8	4.13	4.35	21.40	18.89
I9	3.68	4.27	32.80	25.74
I10	2.51	2.58	54.26	53.39
Price				
I11	4.52	4.83	16.17	9.68
I12	4.67	4.93	13.88	5.48
I13	4.26	4.82	19.95	10.13
I14	4.11	4.60	22.21	17.65
I15	2.12	1.90	57.50	62.56
Processes				
I16	4.24	4.56	21.84	14.57
I17	4.04	4.69	24.80	12.06
I18	4.18	4.68	21.10	11.79
I19	4.29	4.63	19.81	14.47
I20	4.10	4.57	22.00	13.00
P. evidences				
I21	4.34	4.74	18.04	10.11
I22	4.28	4.65	19.30	12.29
I23	4.22	4.66	20.14	12.75
I24	4.26	4.61	20.16	14.45
I25	4.49	4.86	16.35	7.97
Promotion				
I26	3.97	4.35	25.69	18.89
I27	3.41	4.24	36.86	20.25
I28	4.00	4.49	23.68	18.09
I29	3.53	2.83	34.31	46.89
I30	2.95	3.36	43.90	37.06
Placement				
I31	4.01	4.40	26.38	21.57
I32	3.78	4.18	33.99	30.58
I33	3.99	4.45	24.51	17.38
I34	3.99	4.57	24.71	17.98
I35	3.37	2.65	38.43	52.06

Source: Author's calculations

In order to test our hypothesis (H1), which suggests that there are statistically significant differences between guests' and managers' marketing quality perceptions, a detailed analysis of quality assessment between the two

groups of respondents was performed. Paired *t*-test was used in order to determine whether there are statistically significant differences between different attributes' mean scores (see Table 2). As can be seen from the table below, there are statistically significant differences between guests' and managers' perceptions for all seven quality attributes. Research results clearly indicate that restaurant managers assess restaurant quality significantly higher than guests.

Table 2

Quality assessment (*t* – statistics)

Quality attributes	Mean value (managers)	Mean value (guests)	Comparison of means		
			Difference	<i>t</i> – statistics	Significance level
Product	4,72	4,34	0,38	11,68	0,000
Physical e.	4,70	4,33	0,37	11,15	0,000
People	4,08	3,75	0,32	8,78	0,000
Processes	4,63	4,19	0,44	10,93	0,000
Promotion	3,86	3,58	0,28	7,08	0,000
Placement	4,05	3,83	0,22	5,83	0,000
Price	4,22	3,94	0,27	10,28	0,000
<i>Average</i>	4,32	3,99	0,32	-	-

Source: Author's calculations

In the next section of the study, two exploratory factor analyses were performed in order to assess guests' (EFA1) and managers' (EFA2) structure of perceived quality. With factor analyses, we have tried to obtain further in-depth information on the importance of different quality attributes. Preliminary evidences of scales' reliability, factor structures and validity on the basis of the analysed data are presented next.

First, we checked whether the answers to the above 35 indicators (factors) were normally distributed. Because we could not confirm a normal distribution for any of the selected factors for EFA1 and EFA2 (the Kolmogorov Smirnov Test was used), we had to use the Principal Axis Factoring method for both analyses. The first test was performed in order to evaluate the suitability of information for the inclusion in EFA1. Thus, on the basis of the value of the Kaiser – Meyer – Olkinov (KMO) measure of sampling adequacy (0.958), as well as the outcome of the Bartlett test of sphericity ($\chi^2=31071,468$; degrees of freedom=595), we estimated that all included variables are suitable for factor analysis. The majority of factors had satisfactory communalities ($> = 0.50$), suggesting that the greater part of their variability can be explained by the influence of common factors. Three indicators with too low communalities – I9 (0.132), I10 (0.190), and I30 were excluded from the evaluation process. After a few successive iterations of the EFA1 model evaluation, we finally selected as most appropriate the model with 23 indicators (presented in Table 3). The suitability of information for inclusion in the final model is also supported by the

values of KMO (0.957) and the outcome of the Bartlett test ($\chi=223289.398$; degrees of freedom=253). Factor weights with factor loadings above 0.3 and factors that contain more than three items were retained. Based on a rotated factor solution, we have chosen a final model with 23 indicators belonging to three main factor groups (attributes). Results presented in table 3 clearly indicate that guests' quality perceptions are mainly based on the quality of the following marketing attributes (respectively): people (40.97%), placement (5.05%), and product and physical evidences (4.22%). In order to assess internal consistency Cronbach's alpha (α) was calculated. The values for all factor groups (people = 0.764; placement = 0.900; product and physical evidences = 0.900) indicate a reasonably good reliability ($\alpha > 0.8$).

Table 3.

Rotated factor solution – EFA1

Quality indicators (I)	Quality attributes – 7P		
	People	Placement	Product and physical evidences
I17	0.879	-0.096	0.047
I16	0.751	-0.045	-0.049
I27	0.740	0.024	0.144
I18	0.709	-0.006	-0.096
I28	0.649	0.094	-0.034
I7	0.646	0.038	-0.137
I6	0.551	0.054	-0.158
I8	0.473	0.019	-0.187
I13	0.450	0.084	-0.178
I34	0.259	0.448	-0.074
I32	-0.104	0.759	0.038
I31	0.082	0.733	0.020
I33	0.094	0.602	-0.104
I3	0.027	-0.041	-0.747
I4	0.002	-0.016	-0.743
I5	-0.072	0.022	-0.729
I25	-0.041	0.097	-0.676
I2	-0.026	-0.008	-0.667
I1	0.108	-0.060	-0.649
I23	0.138	0.088	-0.502
I21	0.211	0.094	-0.495
I22	0.328	0.054	-0.416
I24	0.320	0.044	-0.395
Explained variance %	40.973	5.058	4.221

**Indicators greyed out were removed from factor analysis.*

Source: Author's calculations

Next, EFA2 was performed. Based on the value of the KMO measure of sampling adequacy (0.828), as well as the outcome of the Bartlett test of sphericity ($\chi^2=2536.781$; degrees of freedom=595), we estimated that all

indicators are suitable for factor analysis. The majority of factors had satisfactory communalities ($> = 0.50$). Two indicators with too low communalities – I5 (0.290) and I10 (0.237) were excluded from the analysis. After a few successive iterations of the model evaluation, we selected the model with 15 indicators (presented in Table 4). The suitability of information for the inclusion in EFA2 is also supported by the values of KMO (0.866) and the outcome of the Bartlett test ($\chi=1130.289$; degrees of freedom=105). Although some communalities belonging to different factors have little lower values than recommended (0.5) (see Table below), based on a rotated factor solution we have decided to include three main factor groups in the final model, as it allows a more meaningful interpretation of the model. As can be seen from table 4, factors (quality indicators) belonging to quality attributes promotion, placement and price, were logically merged into a new – common quality attribute. Based on the rotated matrix of factor weights presented in table 4, it is clearly evident that according to managers' quality perceptions only 15 indicators belonging to three attributes (factor groups) are important in delivering overall restaurant quality (respectively): people (33.04%); promotion, placement and price (8.46%); and product (5.60%). To assess internal consistency Cronbach's alpha (α) was employed. The values for all factor groups (people = 0.689; promotion, placement and price = 0.800; product = 0.756) indicate acceptable reliability.

Table 4.

Rotated factor solution – EFA2

Quality indicators (I)	Quality attributes – 7P		
	People	Promotion, placement and price	Product
I8	0.703	0.039	0.040
I7	0.665	-0.126	0.112
I27	0.643	-0.031	-0.098
I17	0.622	-0.086	0.073
I6	0.445	-0.196	0.276
I24	0.323	-0.249	0.194
I14	0.025	-0.846	-0.067
I34	-0.035	-0.722	0.078
I28	0.298	-0.596	-0.060
I2	-0.088	0.070	0.724
I25	-0.153	-0.261	0.604
I3	0.093	-0.062	0.584
I4	0.240	0.113	0.506
I1	0.254	0.055	0.445
I22	0.311	-0.006	0.416
Explained variance %	33.043	8.468	5.605

**Indicators greyed out were removed from factor analysis.*

Source: Author's calculations

Based on results of both analyses – EFA1 and EFA2, it is clearly evident that according to guests' (40.97%) and managers' (33.04%) beliefs the quality of people (staff) has the greatest importance in assuring overall restaurant quality. These results are consistent with studies (Andaleeb and Conway, 2006; Jaafar, Lumbers and Eves, 2008; Mosavi and Ghaedi 2012; Ryu and Lee, 2017; Voon, 2012) describing the quality of people (staff) as the most important quality attribute for the restaurant industry. Interestingly, the second most important attribute for guests is placement, while for managers the second most important attribute is composed from attributes promotion, placement and price. Results clearly indicate that price did not influence guests' quality perceptions, although demand in restaurant industry tends to be highly price elastic (Sedmak, 2011). Therefore, we may suppose that guests (in terms of quality perceptions) are not price sensitive, if restaurant offerings satisfy their quality expectations. This is an important issue for future research. Finally, results indicate that for both groups of respondents product (food) is only the third most important quality attribute. This finding is contrary to previous studies (Gupta, McLaughlin and Gomez, 2007; Kim, Ng and Kim, 2009; Sulek and Hensley, 2004; Vanniarajan, 2009) which have suggested that food is undoubtedly the most important quality attribute in restaurant offering. The most obvious finding to emerge from the analysis is, that according to guests' and managers' responses not all seven marketing quality attributes (7P) influence restaurant quality perceptions.

5. CONCLUSION

The purpose of this study was to determine how guests and restaurant managers perceive restaurant quality from the marketing perspective. In reviewing the literature, no data was found on the association between guests' and restaurant managers' quality assessment. Previous studies evaluating restaurant quality highlighted the importance of different quality attributes for the restaurant industry. Based on the literature review, we have tested a new marketing – oriented research instrument for measuring guests' and managers' perceptions of restaurant quality.

The evaluation of responses shows that the overall mean value for guests' quality assessment is slightly lower in comparison to managers' overall quality perception. Interestingly, for both groups of respondents the highest – rated attribute was product and the lowest perceptions are related to the attribute promotion. Based on results of exploratory factor analyses (EFA1 and EFA2), it is clearly evident that according to guests' and managers' beliefs the quality of people has the greatest importance in assuring overall restaurant quality. Surprisingly, food quality was found to have little significance in determining the perception of restaurant quality. Returning to the hypothesis posed at the beginning of this study (H1), it is now possible to state that there are statistically significant differences between guests' and managers' perceptions of different

marketing quality attributes. Nevertheless, we can conclude that similarities in quality perceptions exist between both groups of respondents.

This research extends our knowledge of restaurant quality management. This is the first time that marketing attributes have been used to compare guests' and managers' quality perceptions. The generalisability of the marketing approach makes these results easily comparable to other tourism sectors. Nevertheless, number of important limitations need to be considered. The current study only examined domestic respondents' perceptions of restaurant quality. Therefore, additional caution must be applied in generalizing these findings.

In terms of directions for future research, further work could examine whether differences exist between managers of different types of facilities (e.g. full board hotel restaurants, traditional inns etc.) and different segments of guests. Randomised controlled trials combining quantitative and qualitative research approaches could provide more precise evidence on the importance of the presented results. Further research should also focus on determining how restaurant managers measure/explore guests' quality perceptions. Concerning the enormous importance of staff, further research focusing on the role of this attribute could provide a more detailed understanding on how to manage human resources in the restaurant industry. For managers, these results indicate the value of investing substantial effort in understanding the complexity of restaurant quality management. Furthermore, as people presents only one attribute of the marketing mix, managers should regularly measure guests' quality perceptions in order to improve the quality of their offerings and re-evaluate their marketing strategies.

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**MJERENJE KVALITETE U RESTORANSKOJ
INDUSTRIJI S MARKETINŠKE PERSPEKTIVE:
USPOREDBA PERCEPCIJE KVALITETE S GLEDIŠTA
GOSTIJU I MENADŽERA*****Sažetak***

Upravljanje kvalitetom u restoranima, kao relativno novo područje istraživanja, potrebno je učestalo i kritički pratiti iz akademske perspektive. Ranija istraživanja skrenula su pozornost na važnost nekoliko atributa kvalitete u industriji restorana. Međutim, do danas nijedna studija nije usporedila percepcije kvalitete od strane, i menadžera restorana, i njihovih gostiju u kontekstu marketinga (7P). U ovom radu analiziraju se razlike između percepcij kvalitete menadžera i gostiju. Istraživanje je provedeno na dva uzorka – 207 valjanih upitnika koje su uspunili menadžeri restorana i 1998 upitnika koje su ispunili njihovi gosti. Rezultati istraživanja pokazuju postojanje statistički značajnih razlika u percepcijama kvalitete između gostiju i menadžera. Rezultati faktorske analize pokazuju da su ljudi i prema menadžerima i prema gostima daleko najvažniji atribut kvalitete u marketingu kojim se utvrđuje kvaliteta restorana. Ostali atributi kvalitete u marketingu prema ovim rezultatima manje su ili nimalo značajni. Istraživanje je otvorilo mnoga pitanja koja je potrebno dalje istraživati. Daljnja istraživanja trebala bi se usmjeriti na druge sektore turističke industrije.

Ključne riječi – kvaliteta restorana, upravljanje kvalitetom, marketinški atributi, gosti, menadžeri.

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DETERMINANTS OF ABNORMAL AUDIT FEES IN NIGERIAN QUOTED COMPANIES

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Abstract

The aim of the study is to investigate the determinants of abnormal audit fees in Nigerian quoted companies, with specific emphasis on how the firm size, Big4, profitability, joint audit, and leverage impact on abnormal audit fee. The study involved about eighty four (84) manufacturing companies quoted on the Nigerian Stock Exchange as at 31st December 2014. A sample of 56 companies representing 67% was finally selected for the study. Panel regression estimation technique was used in the analysis of the variables. The choice of the panel regression technique is premised on its quality of unbiasedness, increased data point, and control for individual heterogeneity. To test the accuracy of the model, we employed the classical regression assumption tests of normality, heteroskedasticity, serial correlation and multi co-linearity. The study found a positive and statistically significant relationship between the interaction of Big 4 audit firms and firm size and the dependent variable of abnormal audit fees which implies that large firms using Big 4 audit firms tend to pay abnormal audit fees. We, therefore, recommend that large firms should patronise reputable indigenous audit firms.

Keywords: *Abnormal audit fee, firm size, profitability, joint audit, leverage*

1. INTRODUCTION

In the developed countries of Europe and America, empirical consideration on issues of abnormal audit fees is sparse, except for Choi, Kim and Zang (2006) on abnormal audit fees and audit quality; Xie, Cai, and Ye (2010) on abnormal audit fees and audit opinion. However, the same cannot be said of developing countries with emphasis on Nigeria. In general, whether in the developed or developing countries, issues of determinants of abnormal audit fees have not received much empirical attention, save for Ilaboya and Campbell (2015). This paucity of empirical literature creates a knowledge gap which forms the basis of this current contribution. Therefore, the fundamental objective of this study is to investigate the determinants of abnormal audit fees.

From casual empiricism, if normal and abnormal audit fees are borne out of the services of the auditor, it is therefore expected that the determinants of normal audit fees should be the same as the determinants of abnormal audit fees. However, the truism of this assertion lacks empirical justification, hence the motivation for the study.

This study contributes to the small but burgeoning body of knowledge on the dynamics of the determinants of abnormal audit fees by bridging the gap occasioned by sparse empiric in this regard. In Nigeria, while this may not be the first attempt on the issue, we also made a methodological advancement having focused on 56 manufacturing companies compared to the narrow Nigerian banking sector which was the focus of the earlier study.

In a preview of the regression result, we find a positive and significant relationship between firm size, the interaction between firm size and Big 4 and the dependent variable of abnormal audit fees. On the other hand, the relationship between the variable of Big 4 and abnormal audit fees is both negative and statistically significant at the 5% level.

The remainder of the paper proceeds as follows: section two focuses on an empirical review of the literature, section three addresses methodology of the study with an emphasis on analytical framework and modelling, section four focuses on estimation results and discussion of findings, while section five concludes the study.

2. REVIEW OF EMPIRICAL LITERATURE

2.1. Abnormal Audit Fees

Audit fees are of two types. The first are normal fees, which reflect the cost to perform the audit, including labour costs, expected litigation risk losses and normal profit (Simunic, 1980; Choi, Lui&Sumunic, 2005, Asthana & Boone 2012). Normal fees are usually determined by factors that are common across different clients such as client size, client complexity, and client-specific risk. The

second kind is abnormal fees that include abnormal profits from audit engagement (Asthana & Asthana, 2012). These are fees specific to an auditor-client relationship (Higgs & Stantz, 2006; Choi, Kim & Zang, 2006). Extant empirical literature is replete with studies on the determinants of audit (normal) fees. (Antle, Gordon, Narayamoorthy & Zhou, 2006; Asthana & Asthana, 2012; Choi, et al., 2005; Simunic, 1980; Whisenant, Sankaraguruswamy & Raghynandan, 2003). But the same cannot be said of abnormal audit fees.

2.2. Firm Size and Abnormal Audit Fees

Simunic (1980) pioneered the publication in this subject area and firm size seems to be the core explanatory variable in the study of abnormal audit fees. This appears intuitive because, audit fees are paid according to the time spent in completing a given job. Bigger companies are usually involved in a greater number of transactions that necessarily require longer hours for an auditor to inspect. Whisenant et al., (2003); Davis, Ricchiute, and Trompeter (1993); and Ashbaugh, Lafond, and Mayhew (2003) found a positive relationship between firm size and audit fees. Different measures of company size exists: total assets (Taylor & Baker, 1981) ; total sales and number of employees (Haskim & Williams, 1988). According to Sandra and Patrick (1996), the relationship between the size of the clients firm and abnormal audit fees is unlikely to be linear. Pong (1999) observed that it is possible that both assets and turnover feature in a model of the determination of abnormal audit fee. According to Karim and Moizer (1996), the internal control procedures are likely to be more sophisticated in larger companies than smaller ones. The internal control system reduces the risk of errors, and due to this, the total time of the audit will be decreased.

2.3. Big 4 and Abnormal Audit Fees

According to Francis (1984) larger audit firm will charge higher fees to deliver high-quality services in a competitive market in which there is a demand for service differentiation. Thus, audit fees can be used to analyse audit quality and whether there is a demand for differentiation in auditing market. There is still uncertainty as to whether being one of the large audit firms (KPMG, Deloitte, Ernst & Young, and Price Water House Coopers) increases the fees charged for auditing and consulting services. Palmrose (1986) hypothesised three scenario in explaining Big4 and audit fees: the monopolistic nature of the market require high fees; fee premium is charged due to the expected quality of audit and the proposition of lower prices as a result of economies of scale.

DeAngelo (1981b) takes the same perspective and emphasised that large firms will lose more regarding reputation when they make a mistake and, therefore, have an added incentive to do quality work. Other authors also note the existence of the price premium charged by the Big4 auditors (Whisenant et al.,

2003; Zaman, Hudaib, and Haniffa, 2011). Ashbaugh et al., (2003) and Defond, Raghunanda, and Subramanyam (2002) show that companies that hire Big Four firms pay higher consulting fees, but Antle et al. (2006) did not find any significant result.

2.4. Profitability and Abnormal Audit Fees

Profitability is the level of profit in relation to the volume of activity. The profitability of the client can be determined by either the income or loss figure disclosed in the income statement (Firth, 1997; Francis & Simon 1987; Low, Tan, & Koh, 1990; and Karim & Moizer, 1996). Different measures of profit have featured in different accounting researches such as: return on asset (ROA), return on equity (ROE), return on capital employed (ROCE), return on investment (ROI). Clients disclosing high-level of profit may lead to higher audit fees (Pong et al. 1994). It has been established in extant literature that the amount of audit fees is a function of the profitability of the audit client (Sandra & Patrick, 1996) even though some other researches have established a negative relationship between profitability and audit fees (Sankaraguruswam & Whisenant, 2005).

2.5. Joint Audit and Abnormal Audit Fees

Joint audit occurs in a situation where two or more auditors are involved with the audit of business entity resulting in one audit report. The auditors in a joint audit assignment perform both audit planning and field work together. In addition to improving the quality of audit, joint audit provides a reasonable check on the auditors' diligence and ensures the independence of the auditors (Piot & Janin, 2007). The effect of joint audit on abnormal audit fees is a function of the interaction between the auditors. That is, companies with joint audit pay significantly less for their audit than companies without joint audit, hence, there is a negative relationship (Gonthier-Besacier & Schatt, 2007). The relationship tends to be vague if the joint audit involves a Big4 and a smaller audit firm (Lesage, Ratzinger-Sakel & Kettune, 2012). Against the above backdrop, the relationship between joint audit and abnormal audit fees is ambiguous. This ambiguity creates a gap that this research will fill.

2.6. Leverage and Abnormal Audit Fees

Lu and Sapra (2009) observe that companies with higher business risk are associated with auditor conservatism and that increased customer pressure improves auditing quality in this situation. Zaman et al. (2011) opine that leverage is positively related to abnormal audit and consulting fees because, companies that are highly levered require more careful monitoring to shelter them from financial and market risks. Bedard and Johnstone (2004) and Defond et

al.,(2002) find a positive relationship between leverage and abnormal audit fees. While Chaney, , and Shivakumar (2004) report a positive relationship between short-term financial risk and auditing expenses concerning consulting, Ashbaugh et al., (2003) identify a positive relationship between leverage and consulting fee.

3. METHODOLOGY

3.1. Analytical Framework and Model Specification

The framework for the analysis of the determinants of abnormal audit fees in Nigeria quoted companies is the Jensen and Meckling (1976) agency theory. The theory addresses the relationship between resource owners and resource managers which often results in conflict of interest. Alchian and Demsetz (1972) were the first to argue that monitoring the performance of individual work effort is always at a cost to any firm and those organizational inefficiencies are created when the flow of information on individual performance is decreased or blocked. The agency theory advanced two main conflict: How to align the conflicting goals of the principal and the agent and how to ensure that the performance of the agent is in tandem with the expectations of the manager. The solution to either of these agency problems is to ensure that executives or managers act in best interest of the owners by increasing the amount and quality of information available to the principals and making senior executives part owners of the firm through their compensations packages (Watts & Zimmerman, 1983).

Against the above backdrop, we expect that abnormal audit fees will be related to the size of the firm. Consistent with Antle et al., 2006; Choi et al., 2005; Simunic, 1980; &Whisenant et al., 2003) a functional relationship is expected between the size of the firm and abnormal audit fee in the form:

$$ABNFEE= f(\text{firm size}) - - - - - (i)$$

In the same vein, we expect the interaction between firm size and Big 4 auditors to be related to abnormal audit fees. This is because; the size of the firm or company will mean complex activities that may require the services of the Big 4 firms.

From extant literature, profitability is related to normal audit fees (Pong & Whittington,1994; Sandra et al., 1996;). It is also expected that more profitable firms will pay abnormal audit fees. Hence, a significant relationship exists between firm profitability and abnormal audit fees (Chan, Ezzammel, Gwilliam 1993; Hay, Knechel, and Wong, 2006). Therefore

$$ABNFEE = f(\text{Profitability}) - - - - - (ii)$$

Joint audit is also expected to relate to abnormal audit fees. Gontheir-Besacier et al., (2007) observed a negative relationship between joint audit and audit fee. Therefore;

$$ABNFEE = f(\text{Joint Aud}) - - - - - \text{ (iii)}$$

Consistent with Lu et al. (2009), leverage is related to normal audit fees. Consistent with Bedard et al. (2002); Chaney et al. (2004);Defond, Francis and Wong (2002) and Zaman et al. (2011), there exist a positive relationship between leverage and abnormal audit fees. Hence,

$$ABNFEE = f(\text{Leverage}) - -- - - - \text{ (iv)}$$

Collecting equations 1,2,..., 4 in a functional form, we have;

$$ABNFEE = f(\text{firm size, big 4, profitability, joint audit, leverage}) - \text{ (v)}$$

Equation (vii) is expressed in econometric form as;

$$ABNFEE_{it} = \beta_1 + \beta_2 Fsize_{it} + \beta_3 Big4_{it} + \beta_4 Fsize * Big4 + \beta_5 Joint\ audit + \beta_6 Profit - Margin_{it} + \beta_7 Lev_{it} + \epsilon_{it} - - - - - \text{ (vi)}$$

Where; ABNFEE = Abnormal audit fee;F size = Firm size,Big 4 = Big Four ;Profit -- margin Profitability; Joint aud = Joint audit ;Lev = leverage

It is presumptively expected that,

$\beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7 > 0$ from theory and extant literature.

The table below explains the dependent (regressand) variables, independent variables (regressors), how these variables are measured, the sources of information and the co-efficient sign expected.

Table 1

Measurement of Variables

Variable definition	Variable Name	Variable Measurement	Source	Co-efficient Sign expected
Regressand: Abnormal Audit Fees	ABNFEE	Measured as 5 years industry median deviations of audit fees		
Regressors: Firm Size	Fsize	Firm size was measured using total assets	Simunic (1980)	+
Big Four	Big 4	Dummy variables, "1" for Big 4, '0' for None Big 4	Francis (1986)	+
Profitability	Profit _ Margin	Profit after tax to revenue	Sandra et al. (1986)	+
Joint audit engagement	Joint Aud	Joint audit engagement was measured as dummy; where "1" is joint audit and "0" otherwise	Hay (2006)	+
Leverage	Lev	Total dcbt/Total asset	Zeman (2011)	+

Source: Researcher's compilation (2015).

3.2. Research Design

The population of the study is the 84 manufacturing companies listed on the Nigerian Stock Exchange as at December 2014. A total of 56 (fifty-six) firms were purposively (based on the availability of annual reports) selected to form the sample size of the study. The sample constitutes about 67% of the population which can be said to be representative of the population of study.

3.3. Data Estimation Techniques

Data was estimated using the Panel regression technique. The justification for using panel regression is that it gives a large number of data points, increases the degrees of freedom and reduces the co-linearity among explanatory variables. The research design adopted in this study is a combination of the time series and cross-sectional analysis because it will enable us to have an in-depth understanding of the determinants of abnormal audit fees in Nigerian companies.

3.4. Regression Diagnostics

To test the accuracy of the model, we carried out the usual diagnostic tests. We tested for the standard normal distribution of the regression variables using the standard Jarque-Bera test.

$$JB = \frac{N-K}{6} \left(S^2 + \frac{1}{4}(k-3)^2 \right) \quad \text{---} \quad \text{---} \quad \text{---} \quad \text{---} \quad \text{---} \quad \text{---} \quad \text{(vii)}$$

Where S = Skewness, K = Kurtosis, K = Estimated coefficient used to create the series

We tested for serial correlation using the Durbin-Watson statistic given as:

$$d = \frac{\sum_{t=2}^{t=n} (\hat{\mu}_t - \hat{\mu}_{t-1})^2}{\sum_{t=1}^{t=n} \hat{\mu}_t^2} \quad \text{---} \quad \text{---} \quad \text{---} \quad \text{---} \quad \text{---} \quad \text{---} \quad \text{(viii)}$$

To avoid some of the pitfalls of the Durbin-Waston statistics, we applied the Breusch-Godfrey test of the form:

$$u_t = XB + P_1u_{t-1} + P_2u_{t-2} + \dots + P_p u_{t-p} \quad \text{---} \quad \text{---} \quad \text{---} \quad \text{---} \quad \text{(ix)}$$

With the chi-square test of $nR^2 \approx X^2$ (df = p)

We tested for the non-constant variance of the error term (heteroskedasticity) using the Breusch-pagan test of the form:

$$bp = \frac{1}{V} (u - \bar{u}I)' Z(Z'Z)^{-1} Z'(u - \bar{u}I) \tag{x}$$

Where $u = (e_1^2, e_2^2, \dots, e_n^2)$

$I = n \times 1$ vector of ones

$$V = \frac{1}{n} \sum_{i=1}^n (e_i^2 - \frac{e^1 e}{n})^2 \tag{xi}$$

In testing for specification error, we adopted the Ramsey RESET test which assumes that:

$$Y_i = \lambda_1 + \lambda_2 X_i + V_{3i} \tag{xii}$$

$$Y_i = \beta_1 + \beta_2 X_i + \beta_3 \hat{Y}_i^2 + \beta_4 Y_i^3 + u_i \tag{xiii}$$

Therefore,

$$F = \frac{(R_N^2 - R_0^2) / \text{Number of new regressors}}{(1 - R_N^2) / (n - \text{number of parameters in new model})} \tag{xiv}$$

With high f value, it means the model is not mis-specified

4. ESTIMATION RESULTS AND DISCUSSION OF FINDINGS

4.1. Descriptive Statistics

The table below reveals the mean deviation of the variables in the study, the standard deviation and their degree of normality.

Table 2

Results of the Descriptive Statistics

	ABNFEE	JOINTAUD	BIG4	FSIZE	PAT_MAGIN	TL_TA
Mean	9129.043	0.028133	0.800512	7.003785	0.013632	0.581253
Median	0.000000	0.000000	1.000000	6.950000	0.060000	0.560000
Maximum	209468.0	1.000000	1.000000	8.540000	0.710000	1.680000
Minimum	-11000.00	0.000000	0.000000	4.940000	-11.23000	-0.410000
Std. Dev.	29304.00	0.165565	0.400128	0.769052	0.592283	0.226403
Skewness	3.806106	5.707399	-1.504002	-0.064582	-17.61437	0.566928
Kurtosis	20.65591	33.57440	3.262022	2.090932	333.9509	5.721890
Jarque-Bera	6022.654	17352.12	148.5269	13.73532	1804621.	141.6448
Probability	0.000000	0.000000	0.000000	0.001041	0.000000	0.000000
Sum	3569456.	11.00000	313.0000	2738.480	5.330000	227.2700
Sum Sq. Dev.	3.35E+11	10.69054	62.43990	230.6618	136.8114	19.99069
Observations	391	391	391	391	391	391

Source: Researchers computation (e-views 8) 2015

The result of the descriptive statistics shows large JarqueBera values which imply that the regression variables follow the standard normal distribution. This is evident in the bell-shaped histogram in figure 1. The standard deviations are relatively small except the abnormal audit fee with a standard deviation of 29302.4. The result of the standard deviation shows that the variables are clustered round the mean. The mean abnormal audit fee is #9,129M with maximum and minimum values of #209468 and #-11,000 respectively. The positive kurtosis shows the variables are highly peaked near the mean.

The table below shows the histogram normality test of the regression variables and the degree of skewness of variables examined.

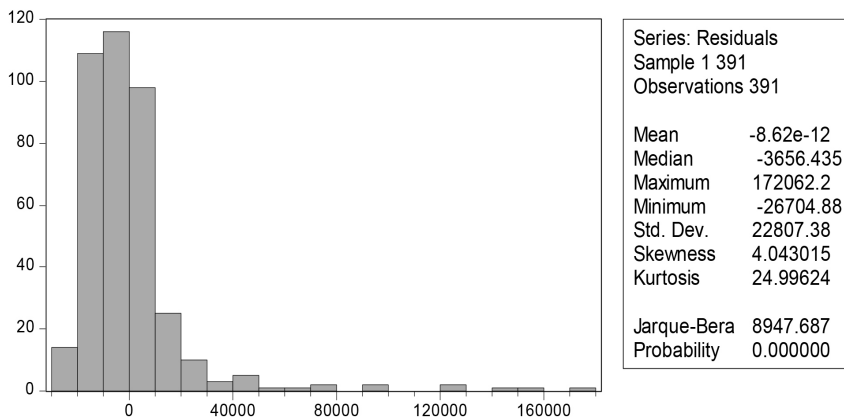


Figure 1 Result of the Histogram Normality Test

The histogram normality test revealed a mean Jarque- Bera value of 8947.687 and an associated probability value of 0.000000 which reveals the normality of the regression variables. The bell-shaped histogram is an evidence of normal distribution. The mean kurtosis value of 24.99624 shows leptokurtic distribution. The positive skewness of 4.043015 shows rightward skew as seen in figure 1.

The table below examines the correlation between the dependent and independent variables with a view to unveiling the degree of correlation between them and also find out if there is any problem of multi co-linearity in the regression variables.

Table 3

Covariance Analysis: Ordinary

Date: 11/08/15 Time: 16:41
 Sample (adjusted): 1 391
 Included observations: 391 after adjustments
 Balanced sample (list wise missing value deletion)

Correlation t-Statistic Probability	ABNFEE	JOINTAUD	BIG4	FSIZE	PAT_MAGIN	TL_TA	CENTERED VIF
ABNFEE	1.000000						NA

JOINTAUD	-0.030610	1.000000					1.033020
	-0.604010	----					
	0.5462	----					
BIG4	0.261331	0.084934	1.000000				4.976912
	5.339815	1.681228	----				
	0.0000	0.0935	----				
FSIZE	0.609596	-0.022185	0.349597	1.000000			7.225929
	15.16704	-0.437656	7.359507	----			
	0.0000	0.6619	0.0000	----			
PAT_MAGIN	0.076089	0.012291	0.114830	0.101632	1.000000		1.041502
	1.505071	0.242433	2.279892	2.014938	----		
	0.1331	0.8086	0.0232	0.0446	----		
TL_TA	-0.005005	-0.052247	0.181085	0.010188	-0.126786	1.000000	1.119506
	-0.098722	-1.031872	3.631592	0.200958	-2.520946	----	
	0.9214	0.3028	0.0003	0.8408	0.0121	----	

Source: Researchers Computation (E-Views 8).

The result of the coefficient of correlation shows mixed coefficient. The dependent variable is negatively correlated with joint audit and leverage. The correlation coefficients are relatively small which implies weak correlation. The highest correlation coefficient is 0.609596 between abnormal audit fee and firm size. Consistent with Bryman and Cramer (1997), the result of the coefficient of correlation is not indicative of any problem of multi co-linearity in the regression variables. The result is further strengthened by the outcome of the test of variance inflation factor. The result of the variance inflation factor further confirmed the absence of multi co-linearity in the regression variables. The centred vif values are all below the benchmark of 10 which means there is no problem of multi co-linearity. The highest centred VIF value is firm size, with a value of 7.225929.

The regression analysis is preceded by the classical regression assumption tests of heteroskerodasticity (using the Breusch – Pagan – Godfrey Test) and test of model misspecification (using the Ramsey RESET test)

Table 4

Regression Diagnostics			
Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	5.584965	Prob. F(5,385)	0.0801
Obs*R-squared	26.44212	Prob. Chi-Square(5)	0.0701
Scaled explained SS	306.8457	Prob. Chi-Square(5)	0.0600
Ramsey RESET Test			
Equation: UNTITLED			
Specification: ABNFEE C JOINTAUD BIG4 FSIZE PAT_MAGIN TL_TA			
Omitted Variables: Squares of fitted values			
	Value	Df	Probability
t-statistic	9.423849	384	0.100
F-statistic	88.80893	(1, 384)	0.200
Likelihood ratio	81.34708	1	0.0100
F-test summary:			

The result of the diagnostics could not sustain the null hypothesis of heteroskedastic residuals and model misspecification as indicated in Table 4. The alternative hypotheses of homoskedasticity and well-specified models were accepted given the probability values of .0801 and 0.100 > 0.05.

The table below (Panel least square), shows the relationship between the dependent and explanatory variables and the interaction between firm size and Big 4.

Table 5

Dependent Variable: ABNFEE

Method: Panel Least Squares

Date: 11/08/15 Time: 16:50

Sample: 2008 2014

Periods included: 7

Cross-sections included: 56

Total panel (unbalanced) observations: 391

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-69114.18	26118.16	-2.646212	0.0085
JOINTAUD	-3280.229	7094.205	-0.462381	0.6441
FSIZE	9667.025	4068.463	2.376088	0.0180
BIG4	-96396.43	29794.26	-3.235403	0.0013
PAT_MAGIN	152.0319	2006.264	0.075779	0.9396
TL_TA	871.0707	5425.501	0.160551	0.8725
FSIZE*BIG4	15276.36	4485.010	3.406094	0.0007

R-squared	0.393647	Mean dependent var	9129.043
Adjusted R-squared	0.384173	S.D. dependent var	29304.00
S.E. of regression	22996.21	Akaike info criterion	22.94179
Sum squared resid	2.03E+11	Schwarz criterion	23.01284
Log likelihood	-4478.119	Hannan-Quinn criter.	22.96995
F-statistic	41.54905	Durbin-Watson stat	0.604628
Prob(F-statistic)	0.000000		

Source: Researchers Computation (E-Views 8) 2015.

The result of the panel least square regression shows that about 38% of the cross-sectional variation in the dependent variable of abnormal audit fee is accounted for by the explanatory variables of firm size, Big 4, profit margin, leverage, joint audit and the interaction between firm size and Big 4. The F-statistic of 41.54905 and the associated probability value of 0.000000 is indicative of a linear relationship between the dependent and the explanatory variables.

There exist a positive and significant positive relationship between the variable of firm size and abnormal audit fee. The implication of this finding is that larger firms attract abnormal audit fee. This is consistent with Carson, (2009); Davis et al.(1993); Whisenant et al.(2003) who also found a positive relationship between firm size and abnormal audit fee.

The negative relationship between the Bigfour audit firm and abnormal audit fee is beyond the likelihood of chance. The variable reported a t-value of -3.235403 and a probability value of 0.0013, which is negative and statistically significant. Even though the finding is not consistent with the extant empirical literature on abnormal audit fees. Most studies on the relationship between Big 4 and abnormal audit fees, tend to be positive and significant (Carson (2009); Francis (1984); Palmrose (1986); Whisenant et al., (2003); Zaman et al., (2011). However, Antle, et al., (2006), did not find a significant relationship. The reason for the absence of the fee premium may be ascribed to the technological and professional competence of the Big 4 audit firms even though this position lacks empirical justification.

The interaction between firm size and Big 4 audit firm is both positive and significant. This indicates that if the size of the firm warrants the services of the Big 4 audit firm, there is the tendency for abnormal audit fees. This position is consistent with the positive relationship between Big 4 and abnormal audit fees (DeAngelo (1981b); Zaman et al. (2011) and moreover, the positive relationship between firm size and abnormal audit fees. (Ashbaugh et al. (2003); Davis et al. (1993); Whisenant et al. (2003).

The variables of leverage and profitability are both positive and insignificant having reported t-values of 0.160551 and 0.075779 respectively. This is consistent with Ashbaugh et al., (2003); Bedard et al., (2004); Defond et al., (2002); Zaman et al., (2011) who found a positive relationship between leverage and abnormal audit fees. In the same vein, Chan (1993); Pong et al., (1994); Sandra et al., (1998); found a positive relationship between profitability and abnormal audit fees.

The variable of joint audit was negative and insignificant which means joint audit reduces the tendency for abnormal audit fees. This is consistent with Gonthier-Besacier et al., (2007).

5. CONCLUSION AND POLICY IMPLICATIONS

The broad objective of the study is to investigate the determinants of abnormal audit fees in Nigerian quoted companies. It is observed that a positive and significantly positive relationship exists between the variable of firm size and abnormal audit fees. There is a negative and significant relationship between the Big 4 audit firms and abnormal audit fees. However, the interaction between the Big 4 audit firms and firm size and abnormal audit fees is positive and significant. A positive and insignificant relationship exists between leverage and profitability. Finally, there is a negative and insignificant relationship between joint audit and abnormal audit fees.

Against the backdrop of the empirical findings, the following recommendations were advanced: The positive relationship between firm size and abnormal audit fees means that organizations should strive towards moderate-sized firms. In the same vein, the positive relationship between the interaction of Big 4 audit firms and firm size and abnormal audit fees implies that large firms using Big 4 audit firms tend to pay abnormal audit fees. We therefore recommend that large firms should patronize reputable indigenous audit firms. The negative relationship between joint audit and abnormal audit fees shows that joint audit reduces abnormal audit fees. We therefore recommend that organizations should embrace joint audit.

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ODREDNICE NEUOBIČAJENIH REVIZORSKIH NAKNADA U KOTIRANIM NIGERIJSKIM TVRTKAMA

Sažetak

Cilj ovoga rada je istražiti odrednice neuobičajenih revizorskih naknada u kotiranim nigerijskim tvrtkama s posebnim osvrtom na utjecaj veličine tvrtke, Big4, profitabilnosti, zajedničke revizije i financijske poluge na previsoku revizorsku naknadu. Istraživanje je obuhvatilo 84 proizvodne tvrtke koje kotiraju na nigerijskoj burzi na dan 31. prosinca 2014. Uzorak od 56 tvrtki, koje predstavljaju 67 % ukupno obrađenih tvrtki, odabrano je za ovaj rad. Tehnika procjene panel regresije korištena je za analizu varijabli. Ova tehnika odabrana je zbog nepristranosti i kontrole individualne heterogenosti. Kako bi se testirala preciznost modela, korišten je klasični regresijski test normaliteta, heteroskedastičnosti, serijske korelacije i multiple kolinearnosti. Rezultati istraživanja pokazali su pozitivan i statistički značajan odnos između revizorskih tvrtki Big4 i veličine tvrtke te zavisne varijable neuobičajenih revizorskih naknada, što upućuje na to da velike tvrtke koje koriste usluge Big4 plaćaju neuobičajene revizorske naknade. Zbog toga smatramo da bi velike tvrtke trebale biti pokrovitelji uglednih domaćih revizorskih tvrtki.

Ključne riječi: neuobičajene revizorske naknade, veličina tvrtke, profitabilnost, zajednička revizija, financijska poluga.

JEL klasifikacija: L25, G29, M42

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MARKETING OPPORTUNITIES OF RETAIL READY PACKAGING – THE CASE OF CROATIAN FOOD MANUFACTURERS

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Abstract

Retail Ready Packaging (RRP) has become a very common on today's retail shelves of fast moving consumer goods sector as a form of packaging that encompasses best characteristics of both secondary and primary packaging. Although greatest benefits enjoy retailers through more efficient in-store operations, manufacturers also seek for better RRP optimization. Therefore, retail (shelf) ready packaging requires great attention in all aspects of its creative and functional designing and implementation, which entails considerable costs, mostly for manufacturers. While significant attention was given in the literature to RRP benefits for retailers, this paper consider RRP from manufacturers' point of view. The survey study among food manufacturers in Croatia was conducted in order to find out how demanding and comprehensive the RRP introduction was and what are the key benefits that can be recognized and utilized as marketing opportunities for manufacturers. Results suggest improvements in impulsive buying of a product and faster shelf replenishment as most valuable factor of RRP for

food manufacturers. Additionally, RRP serves as a tool for manufacturer-retailer cooperation improvement. Finally, manufacturers usually implement RRP in up to 6 months' time frame, almost exclusively in cooperation with other supply chain members. Therefore manufacturers should utilize mentioned marketing functions of RRP in order to most effectively turn the inevitable RRP cost into increased retail sales of their products.

Keywords: *retail ready packaging, food manufacturers, shelf space, in-store marketing*

1. INTRODUCTION

When we talk about ways of communication that brands are using for communicating towards their consumers, automatically we are thinking about classical promotional activities in form of advertising (either through traditional or on-line media). This is because the advertising for a long time was a dominant communication tool (Kesić, 2003). In accepted contemporary marketing theory the right way of looking into brand communication is by applying the concept of integrated marketing communication (IMC). Some authors (Barker et al., 2011; Percy, 2014) consider the primary packaging as one of elements of the integrated marketing communication concept. Percy (2014, p. 142) emphasises packaging as a crucial element of IMC and explains that just as with all other forms of marketing communication, the visual element of a package - it's "massage" - should differentiate it from competitors. Also he explains that well-designed packages can attract attention at the point-of-purchase, a critical attribute for any product where the brand purchase decision follows from recognition brand awareness. In fast moving consumer goods (FMCG) market brand loyalty is relatively weak "habit" and consumers tend to stay "satisfied" with it, especially, if they are constantly reminded of the brand (Silayoi and Speece, 2004).

In the modern era of overwhelming information that we receive from variety of sources, one relevant source is the product packaging. Back in early 1900, development of packaging strongly influenced the development of marketing and "what the manufacturer could name, he could advertise" (Tedlow, 1996, cited in Twede, 2012). The product packaging becomes a dominant communication source for products that consumers tend to buy without detailed pre-buying planning, or buy as a routine, like for example food products. Underwood and Ozanne (1998, p. 208) explain that while we may not know what television shows consumers are watching, which advertisements they have zipped and zapped, or where consumers are strolling in hyperspace, we do know that within the retail environment consumers come in contact with the packaged product. They further also explain that as more point-of-purchase decisions are being made, the potential for packaging to communicate and influence choice is heightened. In favor of the latter, in its' survey, POPAI (2012) found out that shoppers are specifically planning less and deciding more at the shelf – in the time period from 1977 to 2012, point-of-purchase decision rate has increased from 65% to 76% or according to Rundh (2012), it is even 80%.

In terms of examining the packaging issues one often forgets that the primary packaging is not the only packaging of products present in the retail supply chain. Secondary packaging has also become an important ingredient in the packaging concept especially if it is used for display purposes in the retail outlet (Rundh, 2012). Although the main role of secondary or transport packaging is connected with distributional and logistical problems, with the appearance of Retail Ready Packaging (RRP) the space for marketing function of secondary packaging has been opened. According to Durston (2006), back in the RRP beginnings, programme director of TPL Logistics Management Keith Rosser recognized that RRP can improve shelf space, marketing and perceived availability. Secondary packaging nowadays plays a dual role and becomes a merchandising tool to attract consumers at the point of sale (PMMI, 2014). Out of five “easy principals” of functional requirement that RRP has to have (easy to identify, easy to open, easy to shelf, easy to shop and easy to dispose (ECR Europe, 2006, p. 15)) two of them, *easy to identify* and *easy to shop*, are connected with shopping process and are supposed to be designed to simplify the in-store buying process (marketing function). RRP is used both for on-shelf (shelf ready packaging) and off-shelf (display ready packaging) merchandising and it rapidly became a vital marketing element (Wever et al., 2008). Marketing function includes branding aspects and the design of the package as well, and a basic pre-condition is that the exterior appearance maintains the level that is expected of a design brand (Rundh, 2012). The battles for customers’ attention at the point-of-purchase are nowadays going on, not only among primary product packaging, but also among secondary, retail ready packaging, which are on the store shelves and require constant changes, innovations and improvements to stay interesting to customers and to draw their attention better than competition does. Up to 40% of the primary product on the shelf can be obscured by secondary packaging (Smurfit Kappa, 2015a) what clearly indicates on the opportunities and importance of visual attractiveness of RRP. Recently one of the leading RRP producers developed even more improved secondary packaging, named Shelf-Facer, that improves shelf presentation by pulling the products to the front (Smurfit Kappa, 2015b) and this way makes more efficient both packaging, primary and secondary.

In spite of the fact that advantages of RRP are well known for retailers, particularly logistics benefits, this topic is not enough studied in scientific and professional literature. And in addition to that, most of papers address the topic from retailers’ perspective and are focused on investigating the advantages for retailers. To help filling identified literature gap, this paper turns to investigating how food manufacturers can benefit from adopting the RRP to their normal way of equipping and marketing their products. Previous research (Dujak et al., 2014) shows that food manufactures are widely implementing RRP to their normal product equipment process although this means their packaging costs are increasing.

The goal of this paper is to investigate how well food manufacturers in Croatia are implementing RRP in terms of the design of the packaging, how much time they invest in the development process, do they use help of their partners (for example packaging suppliers) for the designing and developing, and what they think

about the benefits of RRP from their point of view. In order to answer these questions the survey among Croatian food manufacturers has been conducted. Survey was constructed to cover the sample of food manufactures with more than 50 employees and to be well distributed among the companies according to different food industries based on NACE 2007 classification¹.

2. LITERATURE REVIEW

2.1. Food Products and Packaging

Packaging has several important functions in the distribution part of supply chain - from the manufacturer to the final consumer in the retail trade. The first and most obvious function is to contain and protect the product on its way from the manufacturer to the end-user. A second function is to display and promote the product on the supermarket shelf by attracting the consumer's attention and creation of a positive impression in order to get the consumer buying the product in a highly competitive environment (Rundh, 2005).

In Table 1 main functions from the technical packaging side and from marketing side are listed, and also divided into categories of different goods or industries.

Table 1

The multi-function of packaging

Category	Packaging function	Marketing function
Transport packages for consumer products	Package must protect products with high moisture content, possibility to staple the packages	Handling physical distribution, storing and display in consumer outlet
Transport packages for industrial products	Package must protect products during changing conditions (sea transport in containers), possibility to staple heavy items	Handling physical distribution, storing and display in business-to-business situations, prevent theft
Packaging board for consumer products (pharmaceutical and media products)	Package must prevent the product and give safety and hygiene. Display the content and prescription of the use of the product	Physical distribution, storing, marketing communication, preventing copying, design, branding, pricing
Packaging board for consumer products (dry food products) and coated or laminated packaging board for consumer products (frozen food and liquid products)	Packaging must preserve taste and safety of the content	Physical distribution, display and communication with consumers, design, branding, pricing

Source: Rundh (2005, p. 681)

¹Statistical classification of economic activities in the European Community, abbreviated as NACE, is the nomenclature of economic activities in the European Union; the term NACE is derived from the French Nomenclature statistique des activités économiques dans la Communauté européenne (Eurostat, 2014)

The two of them are connected with different food products: transport packaging for consumer goods and packaging for frozen, liquid and dry food products. Transport packaging in the terms of marketing functions are focused on the store facility itself. Last one listed in the table 1 is connected with primary packaging of food products and marketing functions in that context are emphasising communication towards consumers (communication of brand, design, and price). Additionally, marketing function of packaging in business-to-business situations is present through whole supply and distribution chain, where companies upstream and downstream from the manufacturer get in touch with secondary branded packaging and are included in its development and design.

Innovation in food and beverage packaging is mostly driven by consumer needs and demands influenced by changing global trends, such as increased life expectancy, fewer organizations investing in food production and distribution and in those terms new solutions are often connected with environment friendly packaging or even intelligent packaging like for example temperature control packaging (Dobrucka, 2013).

Packaging food technologies are also developing as a response to consumer demands or industrial production trends towards mildly preserved, fresh, tasty and convenient food products with prolonged shelf-life and controlled quality. In addition, changes in retailing practices, or consumers' lifestyle, present major challenges to the food packaging industry and act as driving forces for the development of new and improved packaging concepts (Dobrucka et al., 2015) where in that context one of those new concepts is also Retail Ready Packaging.

2.2. Food Products and Retail Ready Packaging

Retail ready packaging (RRP) is a form of transit packaging designed not only for transportation purposes, but also to ease and facilitate the process of in-store replenishment (supply chain function). As a secondary packaging, it is packaging where the actual products are being shipped in from the manufacturer to the retailer (Schrijver, 2013, p. 6). But in the same time, RRP is packaging that enhance the shopping experience for the consumer (Pira International, 2011) and this way benefits all supply chain members (marketing function). RRP allows goods to be moved direct to the point of sale with minimal handling, and to be easily collapsed, disposed of and ready for recycling (Coles, 2013, p.199).

Retailers oriented on its costs and final customer, primarily hard discounters, have recognized potential for improvement of traditional packaging. In their everlasting quest for ways of cutting cost to ensure the lowest possible price, hard discounters have recognized opportunities for savings through RRP's - primarily reducing the time needed to replenish the shelves (Dujak et al., 2014). Creevy (2010) concludes that RRP, in today's forms, first entered European stores in early 2000s - but even before that there were RRP attempts. Some authors (Creevy, 2010) see German hard discounter Aldi as a pioneer of RRP due

to his use of pallets or boxes (that products are delivered on by the supplier) as display units in their stores but according to The Institute of Grocery Distribution, UK retailer Tesco is the pioneer in using RRP. In 2005 Tesco started to organize RRP meetings with their consumer packed goods suppliers. After that, The Institute of Grocery Distribution has done the same with Sainsbury's in UK and in the following years continued with their activities all over the world, from Baltic to Australia and North America (Reynolds, 2010).

When it comes to retail assortment - „nearly 100 percent of discounters' products use RRP, compared with only about 40 percent of non-discounters“ (Warschun, 2011).

Efficient Consumer Response (ECR) published their first Retail Ready Packaging Toolkit in 2006 where the five RRP functional requirements were specified (ECR Europe, 2006, p. 15): Easy Identification, Easy Open, Easy Dispose, Easy Shelf and Easy Shop. Five easy of RRP primarily benefit to retailer during in-store operations (ECR Europe, 2006, p. 6). One more study concluded that we can expect growth of RRP use in the world at a CAGR (Compound Annual Growth Rate) of 3.57 percent over the period 2013-2018 (Infiniti Research Limited, 2014).

Regarding RRP types, ECR Europe (2006, p. 14) classifies all RRP in three types: shelf RRP, merchandising RRP and re-usable RRP.

Main benefits of RRP can be investigated in the store itself, and there IGD (IGD Supply Chain Analysis, 2011) finds considerable number of advantages:

- More accurate stock counting and order generating,
- Less product damages through case cutting,
- Faster identification of products in back room,
- Increased speed in building promotional displays,
- Faster spotting of stock by replenishment teams,
- Faster stocking of shelves,
- Reduced damages, shrink and waste,
- Reduce time to train new staff,
- Less double handling of stock,
- Improved code rotation,
- Faster code checking.

All these benefits should be accomplished with one major goal – to increase sale through its higher on-shelf availability resulting for higher sale and profit both for retailer and manufacturer. And this is the way retailers usually present to manufacturers a need for RRP implementation. Hence, RRP can be classified as a type of retailers' supply chain management collaboration initiative. This initiative can be expressed directly by retailers, or indirectly through necessity arising from competition of other manufacturers who have had direct

request of retailers. Either way, cost of implementing RRP packaging is almost always and exclusively on manufacturers (Dujak et al., 2014).

Majority of RRP are used for food products (nearly 78%) and beverages (16%), and non-foods counts for only 6% in 2010 (Pira International, 2012). In the scientific literature most RRP studies are in the field of fresh food packaging, where the need for this type of packaging is the greatest (Jeyamkondan et al., 2000; Stubbs et al. 2002; Eilert, 2005; Walsh and Kerry, 2012; Venturini et al., 2006; Ranade, 2008). The problem that food manufacturers in Europe and USA (Arzoumanian, 2011), as well in Croatia, usually emphasize is a lack of fair distribution of benefits that result from RRP. Regardless of the increased sales, the introduction of RRP usually leads to an increase in the cost of packaging for manufacturer, while significantly reducing in-store costs at retailers. Fair distribution of achieved savings or costs caused by RRP would represent incentive for further collaboration in other supply chain management areas. Research from United Kingdom has shown that almost half manufacturers in 2006 do not manage to return its investment in RRP, but they still do it “to remain competitive and maintain good customer relationships” (Food Manufacture, 2006).

Considering the fact that there is a large competition for limited shelf space, especially in grocery stores, requirements for packaging with smaller number of products (with single-shelf facings) have become more prevalent (Lorenzi, 2014) and manufacturers should seize the opportunity. Nevertheless previous research (Dujak et al., 2014) identifies the set of benefits for food manufactures also:

- better shelf visibility,
- better shelf “position keeping”,
- better product image,
- better relation with retailers,
- easier start of cooperation with new retailers.

Listed benefits combine direct rise of shelf visibility and creation of better relationship between brands and consumers which leads to improved impulse buying and brand positioning at the point of sales. RRP is transforming from secondary packaging into even more effective sales promotions tool and as branded transport and display packaging, it got deserved attention at the shelf. It improves shelf presentation and turns out as effective, almost free in-store marketing tool for retailers and manufacturers. By using the small store/shelf space as much as possible to send even more branded messages manufacturers exploit one more additional advertising opportunity in the store.

With modern technology and packaging innovations, packaging has become a key interface in the working relationships among suppliers, manufacturers, distributors and end-users, and in their interaction with the physical environment (Coles et al., 2003, cited in Vernuccio et al., 2010). When it

comes to packaging design, there are three basic functions that must be fulfilled: marketing function, logistics function (directly to the customer from manufacturer) and environmental function (reverse logistics) (Johansson et al. 1997, cited in Garcí'a-Arca and Prado Prado, 2008). Furthermore, Hansen (1986) described that packaging has specific influence on buying behaviour through three general packaging aspects: communication, functionality and environment. Even though these are characteristics of primary product packaging, quite old but still mentioned today (Clement, 2007; Arslanagić et al., 2014), they can also be transferred to retail ready packaging, when it comes to its in-store marketing role. In the stated model, communication aspect refers to graphic design, information and brand promotion. All these characteristics are included in two of Five easy of retail ready packaging – easy to identify and easy to shop. Secondly, functionality refers to conditions related to transport from a distributor to retail, and home carrying, use and storage for the primary packaging, but for the retail ready packaging it usually ends in the store. Functionality of RRP is most present through requirements easy open and easy shelf, both most useful in the in-store activities. Transport functionality is even more emphasized for the secondary packaging, when it comes to logistics requirements, and it is greater challenge to design functional and durable retail ready packaging comparing to traditional secondary packaging because of modular packaging and perforations. Finally, environmental aspect describes disposal of packaging after use, what is related to RRP requirement of easy disposal – less material, easily pressed and without duct tape which was often used for traditional secondary packaging.

In the time of standardized secondary packaging, when its' only purpose was to protect the products inside to the delivery point, marketing departments were not largely involved in its design. In the case of RRP, they are involved at least equally as packaging, production and logistics departments or even more and that is also where comes out the importance of marketing functions of RRP for manufacturers. Design of RRP usually goes simultaneously with the (re)design of final product packaging, to complement the visual presentation. Additionally, Aichlmayr (2009) says that many companies are training their design staff to understand various interactions through supply chain. Garcí'a-Arca and Prado Prado (2008) proposed an organizational structure based on the design team, the implementation team and the support team, aiming to accomplish the design and rationalization of the packaging and to ensure the involvement of different departments such as trade area, logistics, production, marketing, purchases, etc. In the paper *An exploratory study of marketing, logistics and ethics in packaging innovation* (Vernuccio et al, 2010), the strong potential for integration of marketing and logistical packaging innovations were founded, mostly for primary packaging that was in focus, but it could apply as well for secondary retail ready packaging.

3. RESEARCH METHODOLOGY

For the purpose of this paper research was conducted from June 2014 to January 2015 on Croatian food manufacturing companies. Base for the population and sample production was Register of Croatian Companies done by Croatian Bureau of Statistics for Croatian Chamber of Economy (Register of Croatian Companies, 2014). The study included Croatian companies that have met the 5 following criteria:

- Active company that is not in bankruptcy,
- Have more than 50 employees,
- Croatian founder,
- Type of organisation: Limited liability company or Joint-stock company,
- Activity code according to NACE2007: C10 (Manufacture of food products).

There were 105 companies in Croatia that meet those criteria, and for research purpose they were divided into two groups: medium Croatian food manufacturers (MCFM) with more than 50 and less than 250 employees (74 companies), and large Croatian food manufacturers (LCFM) with 250 or more employees (31 companies). To all of them were sent the e-mail with a link to the online survey (questionnaire). Questionnaire was aimed to find out food manufacturers' level of RRP adoption and time of first implementation. Also, it measured proportion of products with RRP in whole assortment with their proportion of turnover, level of change in costs associated with RRP, as well as main advantages of RRP for manufacturers. Furthermore the survey was to investigate how well food manufactures are implementing RRP in terms of the design of the packaging, how much time they invest in the development process, do they use help of their partners (for example packaging suppliers) for the designing and developing etc.

Research questionnaire was developed by adapting questions from previous RRP research (IGD Supply Chain analysis, 2011; ECR Italia, 2010;), as well as on the basis of interviews with employees of Croatian large food manufacturer from packaging, logistics and marketing department. Most research constructs were measured using multiple-item 5-point Likert scales.

With sample $n=34$, overall response rate was 32,38 %, ($n_{LCFM}=20$, response rate 64,52% in LCFM; $n_{MCFM}=14$, response rate 18,92% in MCFM). Answers were provided by logistical or marketing managers of companies.

In Table 2 it is possible to see distribution of the companies in the sample in relationship to the distribution of the companies in the population, all arranged according to NACE 2007 classification.

Table 2

Distribution of the companies in the sample and population according to different food industries (according to NACE 2007)

Food industry (NACE 2007)	Frequency	Share in sample (%)	Population	Share in population (%)
C101 Processing and preserving of meat and production of meat products	7	20,6	19	36,8
C102 Processing and preserving of fish, crustaceans and molluscs	2	5,9	8	25
C103 Processing and preserving of fruit and vegetables	3	8,8	5	60
C104 Manufacture of vegetable and animal oils and fats	1	2,9	3	33,3
C105 Manufacture of dairy products	2	5,9	10	20
C106 Manufacture of grain mill products, starches and starch products	3	8,8	7	42,9
C107 Manufacture of bakery and farinaceous products	5	14,7	38	13,15
C1081 Sugar manufacture	2	5,9	3	66,7
C1082 Manufacture of cocoa, chocolate and sugar confectionery	5	14,7	5	100
C1083 Processing of tea and coffee	0	0	3	0
C1084 Manufacture of condiments and other food supplements	1	2,9	1	100
C1089 Manufacture of other food products	3	8,8	3	100
Total	34	100,0	105	

Source: survey

Furthermore, Table 3 shows the distribution of the companies in the sample according to the size of the company.

Table 3

Characteristics of sample according to size of a company

Populations' segments	Population N	Sample n	Respondent rate $f = \frac{n}{N}$
LCFM (more than 250 employees)	31	20	64,52 %
MCFM (between 51 and 250 employees)	74	14	18,92 % (31,11 %*)
Total	105	34	32,38 %

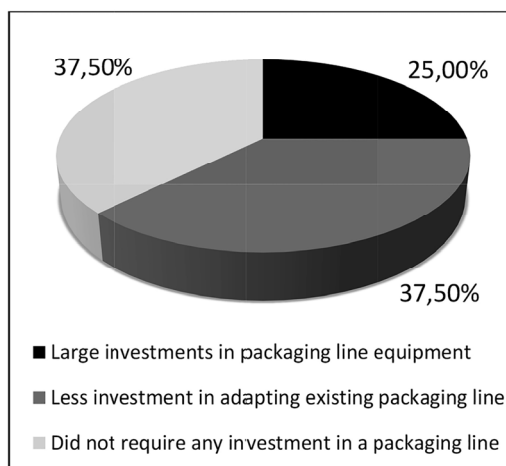
Source: survey

Note: * % without industry C107

If one takes into consideration that 29 of 74 MCFM belong in category C107 Manufacture of bakery and farinaceous products, for which is not characteristic to use RRP as much as in other FMCG categories, response rate is satisfactory for MCFM as well (31,11 % without industry C107).

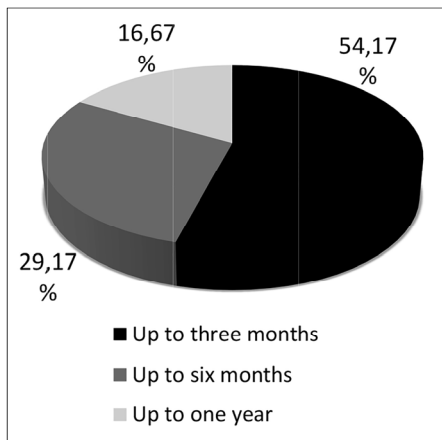
4. RESEARCH RESULTS

The introduction of RRP has required certain financial investments and time (Graph 1 and 2), but it was to some extent “must have”, due to retailers’ requests and competition which has already implemented RRP on the retailers’ shelf. It is interesting that of those who did not have any investment in a packaging line, even 44,44 % of them needed more than three months for introduction of first RRP.



Graph 1 The investment required for RRP implementation

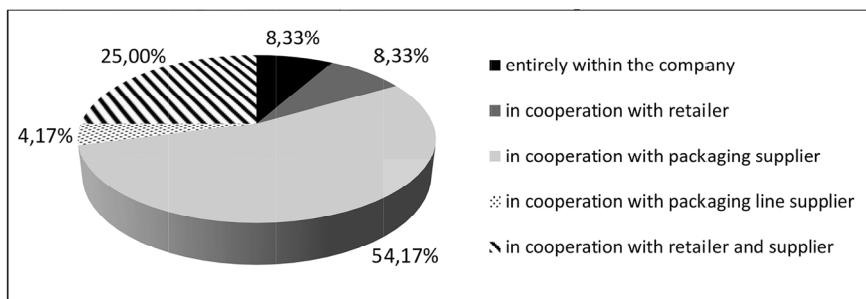
Source: survey



Graph 2 The time needed for the implementation of the first RRP

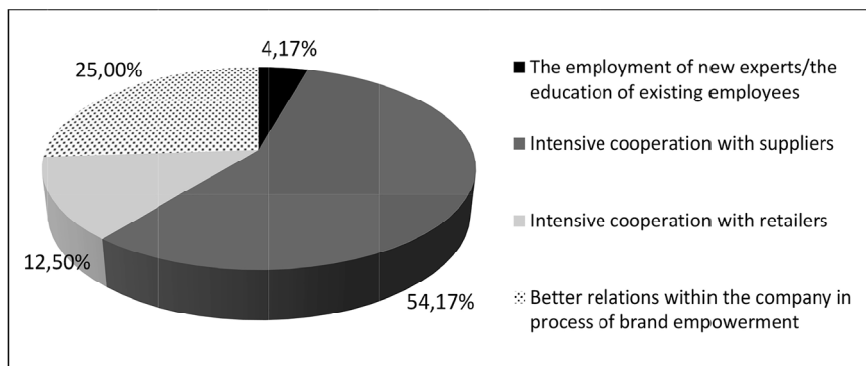
Source: survey

As already mentioned before, RRP improves communication not only with final buyers, but also with other partners in supply chain. The importance of this is evident when it comes to packaging suppliers whose innovation skills and willingness for development are crucial. Graph 3 shows that 54,17 % companies develop its RRP solutions with packaging supplier, while 25% of them develop it both with packaging suppliers and retailers. Only 8,33 % of manufacturers develop RRP alone - entirely within the company. That confirms that RRP solutions can only be delivered in "genuine partnership" (IGD, 2005). In this situation they are together developing a new product to some extent, what increases trust and improves future relationship. Except improvement of relationship with suppliers (54,17 %), RRP significantly improves relations within the company in process of brand empowerment (Graph 4)



Graph 3 The cooperation for RRP development solutions

Source: survey



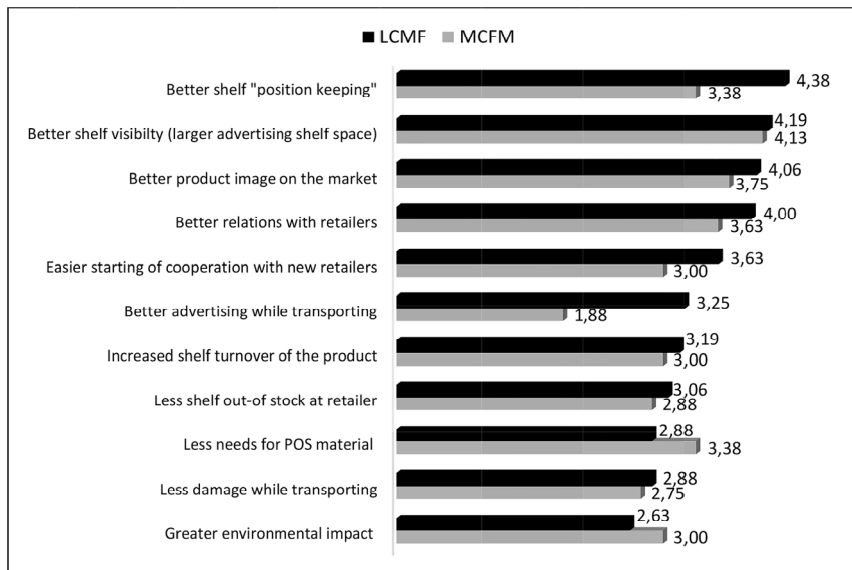
Graph 4 The impact of RRP within the company

Source: survey

When it comes to company size, medium and large companies perceive differently marketing benefits of RRP (Graph 5), mostly due to different marketing budget and the level of overall marketing communication. By using 5-point Likert scale with 1-“Not advantage at all”, and 5-“Exceptional advantage” as anchors, key benefits of RRP for manufacturers has been examined. As the greatest benefit of RRP, large companies find better shelf “position keeping”, what emphasizes the importance of shelf position that communicates with final buyer and keeping it in every situation, which they are aware of. That RRP complements the overall marketing communication which is at high level for LCFM, one can see from generally higher ratings given by LCFM and particularly from high ratings for better product image on the market (mean= 4,06), better relations with retailers (mean = 4) and easier starting of cooperation with new retailers (mean = 3,63).

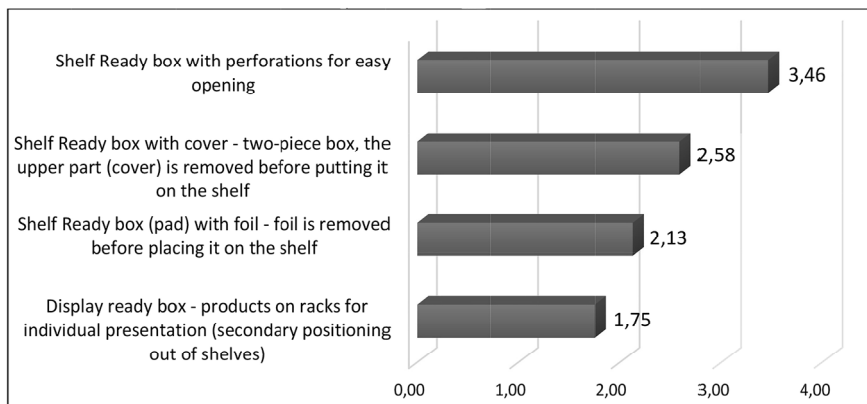
The greatest difference in rating is for benefit better advertising while transporting, for LCFM mean is 3,25 and for MCFM mean is 1,88.

As an in-store marketing tool for MCFM, RRP replaces to some extent other POS material (mean = 3,375), while LCFM do not find it as interesting (mean = 2,88), probably due to the larger marketing budget and the entire image that POS material complement, as well as RRP. It is interesting that MCFM have recognized greater environmental impact (mean =3) of RRP than the LCFM (mean =2,63), because nowadays sustainability is very powerful marketing tool.



Graph 5 Means of RRP benefits from manufacturers' perspective by the company size
 Source: survey

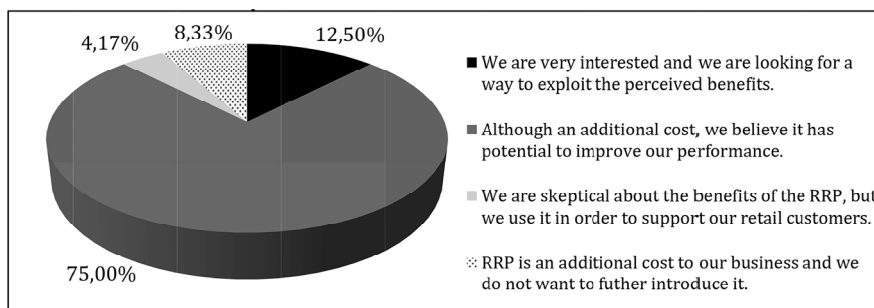
The type of RRP that Croatian food manufacturers mostly use is shelf ready box with perforations for easy opening (Graph 6). It is the type that corresponds to many FMCG industries whose products are smaller sized. This type of RRP offers increased advertising opportunities due to larger packaging surface then in case of primary packaging or in case of type with foil. Display ready box type of RRP is most suitable for advertising, but also most expensive type (reason for rarest use by manufacturers).



Graph 6 Used types of RRP

Source: survey

The attitude of Croatian food manufacturers towards RRP in the future based on their RRP experience so far, can be seen on Graph 7.



Graph 7 The attitude towards RRP in the future

Source:survey

Even though RRP for food manufacturers is only cost-demanding and not cost-sharing initiative which came from retailers, they have recognized it as an opportunity to improve their performance in various levels and aspects. 87,5 % of companies see RRP as a tool they will further develop and implement in order to use perceived benefits and improve their performance.

5. CONCLUSION

One of many changes initiated by retailers is Retail Ready Packaging, which brings most benefits to retailers' in-store replenishment activities, the most expensive activities. Taking into consideration the fact that RRP significantly decreases costs of FMCG shelf replenishment, food manufacturers whose products belong to this group, must accept this additional cost and strive to make the most of it for themselves. RRP should be their marketing tool, both up- and downstream in the supply chain, bearing in mind the physical contact that the final consumer has with RRP at the point of purchase.

Research has shown that Croatian food manufacturers are aware of the complexity of RRP introduction considering the needed time and investment. It confirms the importance of RRP functionality within the production, through the distribution chain and the visual attractiveness all along to the final consumer. One can see how different and more challenging RRP is from previous transport packaging, because of its' functionality requirements, but also because it is present on the shelf where it is in contact with final consumer. That makes secondary packaging, or more precisely RRP, one more area where manufacturers

are competing for consumers' attention in the store, but also to differentiate themselves in the distribution chain.

The research also showed that most commonly used type of RRP is shelf ready box with perforations for easy opening. That type of box offers the largest area for branded messages and the possibility of emphasizing the company's logo or any other targeted advertisement after opening with its modularity. Shelf ready box with foil leaves less space for advertising and it is less often used.

Large food manufacturers are aware that nowadays RRP is one of the common requests from retailers, great majority of them use RRP, 83,3 % (Dujak et al, 2014) and generally they see greater benefits in RRP comparing to medium food manufacturers. Large companies see more marketing opportunities in every phase in product distribution – primarily to advertise and strengthen their brand to final consumers, as well as to all participants of supply chain who get in contact with secondary packaging. Additionally, it helps them to improve and strengthen their relationship marketing with retailers and to maintain their role in category management process, especially space management on the shelf level.

Generally, food manufacturers are aware of the benefits that RRP provides. Despite being the cost for them, they believe it can improve their performance. Therefore, they should take the advantage of all its marketing potential and opportunities.

Research limitations arise from the fact that research was conducted only among Croatian food manufacturers with various shares of different food industries, and therefore could be seen as indicative research. Further research should also include beverage and non-food products belonging to FMCG industry, and manufacturers from other countries as well.

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MARKETINŠKE PRILIKE PAKIRANJA SPREMNOG ZA MALOPRODAJU - PRIMJER HRVATSKIH PROIZVOĐAČA HRANE

Sažetak

Ambalaža spremna za maloprodaju (RRP) danas se redovito pojavljuje na policama u maloprodaji robe široke potrošnje kao oblik ambalaže koji sadrži najbolje karakteristike i sekundarne i primarne ambalaže. Premda najveću korist imaju maloprodajni lanci jer je rad u prodavaonicama učinkovitiji, proizvođači također traže način brže optimizacije RRP-a. Zbog toga ambalaža spremna za maloprodaju (police u trgovinama) traži posebnu pažnju u svim aspektima kreativnog i funkcionalnog dizajna i primjene, što nosi velik trošak, najviše proizvođačima. Premda se u literaturi značajna pažnja posvećuje RRP prednostima za maloprodajne lance, u ovom se radu RRP razmatra s gledišta proizvođača. Među hrvatskim proizvođačima hrane provedeno je istraživanje čiji je cilj bio saznati koliko je uvođenje RRP-a zahtjevno i složeno te koje su njegove ključne prednosti koje proizvođači mogu prepoznati i iskoristiti u marketinšku svrhu. Rezultati istraživanja upućuju na poticanje impulzivne kupovine proizvoda i brže ponovno punjenje polica kao RRP čimbenik od kojeg će proizvođači hrane imati najviše koristi. Osim toga, RRP služi kao alat za poboljšanje suradnje proizvođača i maloprodajnog lanca. Proizvođači obično primjenjuju RRP u roku šest mjeseci, skoro isključivo u suradnji s drugim sudionicima u lancu nabave. Zato bi proizvođači trebali koristiti spomenute marketinške funkcije RRP-a, kako

bi što učinkovitije pretvorili neizbježni trošak RRP-a u povećanje prodaje svojih proizvoda u maloprodajnom lancu.

Ključne riječi: pakiranje spremno za maloprodaju, proizvođači hrane, mjesto na polici, marketing u prodavaonici.

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INFLUENCE OF PERCEIVED EXPORT BARRIERS ON THE EXPORT INTENSITY OF THE CROATIAN MANUFACTURERS

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Abstract

This paper examines the influence of the perceived export barriers on export intensity. The survey was conducted on the sample of 100 Croatian manufacturers. Upon review of the literature 14 variables of the export barriers have been identified. The results reveal a negative relationship between the perceived export barriers on export intensity. Factor analyses were used to sort variables to 4 categories. This model introduced external environment factor, organization and commitment, governmental factor and financial factor as critical obstacles to export intensity of Croatian companies. The survey emphasized the prevailing role of the export experience and knowledge in effective overcoming export challenges and recognizing export opportunities.

Keywords: internationalization, export barriers, export intensity, managers' experience

1. INTRODUCTION

Globalization and liberalization have improved international trade dramatically in the past several decades. Continuous market deregulations, regional trade agreements caused significant growth of the world export. As of 2009 until 2015 the global export of goods increased by 50% (WTO Statistics; 2010 – 2015). Nevertheless, trade barriers still exist.

Export companies worldwide are facing difficulties when entering international markets. Dealing with such obstacles influences the decision to enter foreign market, and finally, export performance. For that reason, solving barriers' problem is the essential part of marketing strategy.

Management and marketing academic literature has placed many conceptual suggestions for improvement of the internationalization processes (Aaby and Slater 1989). Export barriers have been the subject of empirical research since internationalization took a swing (Groke and Kreidle, 1967; Morgan and Katsikeas, 1998; Rabino 1980; Leonidou, 2000). However, multiple studies have shown that the relationship between export barriers and level of export activity is somewhat controversial. Some studies proved a negative relationship, e.g. Leonidou (2000), while the others proved a positive relationship, e.g. Kneller and Pisu (2011). Consequently, the relation between export barriers and success in the international market is an inexhaustible research problem.

According to the World Bank (2016) national accounts data, approximately 49,38% of Croatia's GDP comes from the export of goods and services to international markets. Despite becoming the member of European Union, export of goods has not been changed as expected (Statistical Yearbook, 2014, 2015). Although tariff barriers have dropped, Croatian exporters are still experiencing complications in the process of internalization. Consequently, only 15% of Croatian companies export (Central Government Portal).

Competitiveness of Croatian companies has been the subject of several studies. Jakšić and Žmuk (2014) have searched for the reasons why Croatia did not manage to recover exports above the pre-crisis level. They came to conclusion that Croatia is the only CSEE economy where the real exchange rate is the key factor of export dynamics. Croatian export is heavily dependent on German real exchange rate directly and US real exchange rate indirectly. Buturac and Gržinić (2009) stated that the differences in the size of Croatian export among EU countries could be well explained by the geographical distance between Croatia and individual EU countries, as well as, by the GDP of the EU countries. Croatian manufacturing industry is characterized by the lack of investment in production and reduced innovating competences of the companies (Bezić et al., 2011). For that reason Croatian exporters rely on cost reductions and improvements in labour productivity (Stojčić, 2012).

Since there are no studies concerning export barriers that affect Croatian exporters, it is justifiable to conduct such a research. The main purpose is to determine key export obstacles that threaten export performance measured by export intensity. This survey presents deeper insight into the export barriers and the extent to which such limitations hinder export activities. Data for the study were obtained via questionnaire on the sample of 100 Croatian companies.

The paper is structured as follows: introduction, literature review, methodology, results, discussion and conclusion with implications for further research.

2. LITERATURE REVIEW

2.1. Export performance and export intensity

Export performance has been a subject of numerous studies dealing with companies' internationalization. The earliest papers described the very process of the internalization (Bilkey and Tesar, 1977; Cavusgil, 1982, 1984; Czinkota and Johnston, 1981; Johanson and Weidernsheim-Paul, 1975). Some later authors have deepened the issue writing about international performance (Bilkey, 1982; Kirpalany and Macintosh, 1980; Rosson and Ford, 1980, 1982; Shoham and Albaum, 1994; Shoham, 1998; Sousa, Martínez-López, and Coelho, 2008; Wheeler, Ibeh, and Dimitratos, 2008). However, there is no consensus among researchers about unique definition of the export performance. Export performance represents the outcome of a firm's activities in export markets (Papadopoulos and Martín Martín, 2010). Export performance can also be defined as the result of the company's international activities. From this perspective, export performance is the extent to which the company achieves its objectives when exporting a product to an international market (Navarro et al., 2010). Shoham (1998) introduced a three-dimensional measurement of the export performance. Those subdimensions are: sales, change of sales and profitability. Change of sales is a benchmark dimension and refers to export sales and the sales of the reference point, such as competitor export sales or company's past export sales (Shoham, 1998).

Export intensity is one of the export performance measures, together with perceived profitability (Bilkey, 1982) and continuous export engagement (Brooks and Rosson, 1982). It is defined as the percentage of the international sale (Axinn, 1988; Pan and Chi, 1999; Rose and Shoham, 2002; Mánez-Castillejo et al., 2010). On the other hand, export intensity could be understood as the proportion of the production exported in relation to total production (Lageset at, 2008).

Export intensity directly influences the degree of the internationalization (Pla and Cobos, 2002). The bigger the export intensity coefficient, the higher the level of internationalization.

According to the literature on internationalization, the most important factors that influence export performance are managers' perceptions on export activities (Aaby and Slater, 1989; Zou and Stan, 1998) as well as managers' perceptions on export barriers.

2.2. Export barriers

Export barriers can be defined as the attitudinal, structural, operational and other constraints that hinder a firm's ability to initiate, develop or sustain international operations (Koksal and Kettaneh, 2011; Leonidou, 2004). Such obstacles are also defined as the problems that prevent non-internationalized companies to be involved in the process of the internationalization (Morgan and Katsikeas, 1998).

Since the globalization process started, the necessity for adaptation to the challenges of the rising international trade has become an important research problem to many authors (Leonidou, 2000).

One of the earliest researches dealing with export barriers was conducted by Groke and Kreidle (1967). They identified main obstacles to export: the lack of specific information on the export activity (including transportation, credit extension, documentation and data about product adaptation), the competition in the target markets, the difficulties connected to the export activity such as government restrictions, documentation, market segmentation, cost and availability of transport and administrative problems in the foreign market.

There were continuous studies during the ninth decade of the last century. For example Rabino (1980) detected 10 export barriers, Bauersmidt et al. (1985) 17 export barriers.

Morgan and Katsikeas (1997) investigated export obstacles of the small and medium sized enterprises and grouped them as follows: export marketing knowledge and communication, national export administration, product characteristics and export competitive position.

Schroath and Korth (1998) divided 211 barriers into nine groups: foreign market opportunities, lack of knowledge about the opportunities in the export market, lack of qualified personnel, lack of knowledge about export regulation, problems of language and culture, exchange of currencies, costs of international operations, lack of capital for the expansion abroad, concern about the domestic market and other barriers.

One of the most cited authors is Leonidou (1995a, 1995b, 2000, 2004). He proposed two broad categories of the barriers. Internal barriers exist within the organization and are often associated with resources of the company or its international marketing strategy. External barriers take place outside the company, either in the domestic or international market Leonidou (1995a, 2004.). Parallel approach is found in the study of Koksal and Kettaneh (2011). They

conducted a study of two developing countries, Turkey and Lebanon, by dividing export barriers in two groups; internal barriers and external barriers. Their study showed that the burden of tariff/non-tariff barriers by host countries negatively affected the performance of firms in both samples, based on export volume and market share. They found that a strong brand image in foreign markets offers prospects for capitalizing on economies of scale, developing global markets and helping to establish a firm's visibility and position in the minds of international consumers.

In another Leonidou's paper (Leonidou, 2000) 20 export barriers¹ were analyzed on the base of 100 Cyprus export companies. These barriers were categorized in six groups: corporate resource constraints, environmental differences, export bureaucracy and legislation, government apathy, foreign market entry and operating difficulties and competitive pressures.

Similar classification is found in an earlier survey. Katsikeas and Leonidou (1996) grouped 24 export barriers in eight categories: information and communication with the export market, product adaptation, restrictions of export prices, adaptation of the marketing strategies, exogenous logistical constraints, national export policy, procedural complexity and devaluation of the domestic currency.

Westhead et al. (2002) offered their conceptual model of export barriers which were organized as follows: strategic barriers, information barriers, and operational barriers. Additionally, Arteaga and Fernández (2010) propose another classification of export barriers dividing them into 4 groups: barriers of knowledge, resources based barriers, process barriers and external barriers.

Da Silva and Da Rocha (2001) studied 69 exporters from Brazil and proved that lack of incentives, strong international competition and exchange rate policies are the most influential obstacles to export activities. Ortega's paper (2003) on Spanish exporters and non-exporters, involving only small and medium sized enterprises, is another research that introduced lack of resources, strong foreign competition and lack of export knowledge as export barriers (Ortega, 2003). Based on the study, he concluded that export procedures can be the main motive for the introduction of an export activity (Altintas, Tokol, and Harcar, 2007).

¹ Existence of keen competition abroad, inability to offer satisfactory prices, deteriorating of economic conditions abroad, lack of government assistance, limited information to locate and analyze foreign markets, high political risk or instability abroad, perception of high business risks and costs abroad, shortage of working capital, high tariff and non-tariff barriers, inadequate transportation and infrastructural facilities, restrictions imposed by rules and regulations, different customer habits and attitudes, difficulty in locating and obtaining representation, unfavorable foreign exchange rates, different product standards and specifications, inadequate and untrained staff, unfamiliarity of foreign business practice, different cultural traits and language abroad, difficulty in handling documentation and procedures and inability to offer technical after sales service.

Kneller and Pisu referred to changes in consumers' preferences, the presence of middlemen and agent representatives, import tariffs, problems finding a dependable distributor in the target market, exchange rate instabilities, risk of losing money in the international market, and quality and safety standards as potential export barriers to firms (Kneller and Pisu, 2011).

Taking into consideration revisited literature; there is no uniform classification of the export barriers and, accordingly, no common opinion about which obstacle is the most threatening and how to overcome it.

Leonidou (2004) considered the inadequate information, low price competitiveness, the consumers' buying habits and political-economic barriers as major obstacles for achieving desired export intensity.

According to numerous papers (eg, Katsikeas and Morgan, 1994; Julian and Ahmed, 2005; Hutchinson et al., 2009), the acquisition of information is a precondition for increasing export activity because it reduces uncertainty (Souchon and Diamantopoulos, 1997, 1999) and increases export performance (Yeoh, 2000).

2.3. The impact of export performance and export intensity on export barriers

The relationship between export barriers and export performance or intensity was the subject of many research papers. However, the results are not entirely in accordance. For example, Zou and Stan (1998, p. 351) analysed 50 studies dealing with export performance conducted all over the world. The conclusion is that the export barriers fail to be significant predictors of export performance. These findings suggest that it is important for the management to focus on the advantages rather than barriers to exporting, and keep a positive attitude toward the outlook of export operations (Zou and Stan, 1998).

Kneller and Pisu (2011) came to the conclusion that among many firm- and industry-level variables, only export experience appeared to be significantly related, in a negative way, to trade costs generated by specific barriers. The companies are able to learn from their past experience how to overcome new export barriers and therefore manage the trade costs associated with these markets (Kneller and Pisu, 2011).

Mavrogiannis, Bournakis, Dowson and Ness evaluated the export performance of Greek food and beverage exporters. Their research involved a diversity of variables and also included export barriers. They determined that export barriers had a negative effect on export performance and Greek exporters should be proactive and innovative to resolve export difficulties and trade barriers. On the other hand, the role of the government was crucial in easing export performance. Government policies can help exporters to overcome export barriers by providing information about overseas markets and host country

partners, and by educating managers to design and implement suitable export marketing strategies (Mavrogiannis et al., 2008).

Castillo et al (2013) conducted a survey on the sample of 214 Spanish companies. Authors examined moderating effect of R&D investment and export experience of the company on the relationship between the perceived export barriers and export intensity. The analysis revealed that R&D investment had a moderate influence on the relationship mentioned and export experience had a direct influence on the export intensity.

An interesting research was done by Jalali (2012) investigating export barriers to the export performance of Greek companies targeting Iranian market. The model identifies the most important barriers: noncompetitive prices, limited information about foreign markets, unfamiliar foreign business practice and insufficient production capacity. Companies from the emerging countries should control their product prices by cost effectiveness of the company's operations, because price oriented strategies are vital in creating competitive advantage in international markets (Jalali, 2012).

Institutional environment may be an important obstacle for successful international business, especially considering small and middle sized enterprises in transition economies. The biggest negative influence on the degree of internationalization belongs to the tax rates, tax administration and corruption (Shirokova and Tsukanova, 2013).

From the arguments elaborated above, it can be concluded that there are certain incompatibilities among research results. The reason lies in the perceptual character of the variables. Managers perceive the same export barriers in a different manner, and create specific marketing strategies accordingly.

3. METHODOLOGY

3.1. Sampling and data collection

The study sample consisted of 100 Croatian companies of the manufacturing sector: a) food and beverage, b) clothing, c) soaps, detergents, cleaning agents, perfumes and cosmetics, d) furniture and e) electronic and optical devices. The register of business entities (www.biznet.hr) was used for the purpose of research. The sample was selected randomly using a stratified sampling method. This approach allowed us to include respondents in all the above industrial sectors in the study and thus obtain a more representative sample of the population (compared with, e.g., simple random sampling) (Robson, 2011). The industries chosen are also appropriate for the purpose of this study because a clear trend towards more international activities has been observed, through export activities in Croatia over the past decade (Statistical Yearbook, 2014, 2015).

A standardized structured questionnaire was designed for this study and was used to collect data from senior managers, who acted as key informants. It was expected that this group would provide more precise responses for the purposes of this study because their position allows them to observe the entire organization (Glick, et al. 1990).

The design of the questionnaire was based on measures from the literature studied previously and modified for the current research context (Churchill, 1979). Additionally, a preliminary study had been conducted to assure that all questions and measurements were correctly structured.

The questionnaire was divided in two parts. The first part refers to basic information about the company and the manager, and the second part consists of the statements that reflect managers' perceptions of the export barriers.

The survey was performed in March, April, May and June in 2016. The questionnaire was sent to 455 companies by e-mail.

3.2. Variables and measurement

Export barriers represent independent variables, acting as a limitation factor in the international business. Since the previous studies offer a vast number of categories, the process of selection was necessary. Originally, 20 variables were selected. After preliminary analysis, the following 14 barriers were included:

Insufficient target market information	Leonidou (2000); Koksal et al. 2011; Castillo et al., (2013).
Different customer culture	Leonidou, (2000); Castillo et al., (2013)
Access to the foreign distribution channels	Castillo et al., (2013)
Shortage of skilled export staff	Leonidou, (2000); Ortega, (2003)
Lack of government assistance	Leonidou, (2000); Jalali, (2012)
Unfamiliar export procedures	Leonidou, (2000); Jalali, (2012); Castillo et al., (2013);
Tariff and non-tariff barriers	Leonidou (2000); Shirokova and Tsukanova (2013)
Special quality standards	Leonidou (2000); Kneller et al. (2008)
Uncompetitive prices	Leonidou (2000);
High foreign competition	Leonidou (2000); Da Silva et al. (2001), Ortega (2003); Jalali, (2012)
Exchange rate	Leonidou (2000); Da Silva et al. (2001); Kneller et al. (2008)
Expensive bank loans	Leonidou (2000)
Focus on home market	Katsikeas and Leonidou (1996); Castillo et al., (2013)
Low expectations from international market	Katsikeas and Leonidou (1996); Castillo et al., (2013)

The effect of the barriers was measured by 5 point Likert scale (Leonidou, 2000), from 1 no influence to 5 high influence.

Export intensity is a dependent variable. It is measured as a value of sales on the international markets in relation to total sales (Pan and Chi, 1999.) Like most measures, export intensity is self-reported based on managers' perceptions (Castillo et al. 2013; Eusebio and Llonch, 2006; Lages and Leal, 2004). Authors offered a five-interval scale as follows: < 10%; 10% - 24,9%; 25% - 49,9%; 50% - 74,9%; 75% -100%.

Control variables were also included in the analysis. The first control variable is the size of the company. A company's size is often suggested to enhance its export intensity. Utilizing economies of scale, access to specialized executives, their marketing and sales departments, and the possibility of financing at lower cost provide advantages for exporting firms to enhance their performance (Wagner, 1995, 2001). The size of the company is measured as the average number of full time employees in the past three years on a six-interval scale: < 10; 10 -24; 25 - 49; 50 - 99; 100 - 249; 250 or more.

The second control variable is manager's experience in the export (Chetty et al., 2014). The measure is the number of years on current position. The managers who have been on the leading position longer should have more knowledge about export procedures, and more experience to adapt to the potential international business challenges (Kneller and Pisu, 2011). For the purpose of the analysis, the number of the years will be converted into a logarithm.

The statistical analysis was performed in several steps. First of all, all variables in the model were tested for significance. Consequently, six out of 20 export barriers were removed from the model for significance failure: difficulties of foreign promotion, complex administrative procedures, packaging and labeling requirements, foreign corruption, communication difficulties and transport costs. Cronbach's alpha of the model was 0,885. The values of Cronbach's alpha if item deleted were calculated and compared to the main α value (Table 1). Variance inflation factor (VIF) was used to detect multicollinearity. If VIF value exceeds 10, than the model has multicollinearity and some variables should be removed. In this particular case, VIF values were much lower than 10, namely 1,933.

The correlation matrix was calculated for significant variables to examine if there was any linear relation between them. The main purpose was to seek any relationship between export barriers and export intensity.

Next step was factor analysis to find which variables of the export barriers were strongly associated with one another. In other words, we composed these 14 variables into four categories (factors).

Finally, the factors were controlled by the size of the companies and managers' experience variables. Statistical software SPSS was used for the analysis.

4. RESULTS

Out of 455 companies covered by the survey, 100 valid questionnaires were received. That gives the return rate of 22%. The structure of the respondents consists of: a) food and beverage: 26 companies, b) clothing: 25, c) soaps, detergents, cleaning agents, perfumes and cosmetics: 24 companies, d) furniture: 14 companies and e) electronic and optical devices: 11 companies. The average age of the company is 19 years. One third of the sample exports occasionally and two thirds export on regular basis. Table 1 shows descriptive statistics for all variables included in the analysis. Table 2 gives a review of Spearman's rho coefficients of the variables analysed.

Table 1.

Descriptive statistics (N=100)

Variables	Code	Mean	α if item del.	St. dev.
Export intensity	E1	3,88	0,723	2,18
Insufficient target market information	EB1	4,21	0,824	3,21
Different customer culture	EB2	2,96	0,873	2,48
Access to foreign distribution channels	EB3	3,47	0,744	2,11
Shortage of skilled export staff	EB4	3,91	0,721	1,78
Lack of government assistance	EB5	4,22	0,788	1,48
Unfamiliar export procedures	EB6	3,22	0,863	1,05
Tariff and non-tariff barriers	EB7	2,87	0,851	2,04
Special quality standards	EB8	2,11	0,711	1,68
Uncompetitive prices	EB9	3,44	0,655	1,54
High foreign competition	EB10	3,79	0,667	1,54
Exchange rate	EB11	3,89	0,742	1,78
Expensive bank loans	EB12	4,12	0,847	2,68
Focus on home market	EB13	1,78	0,776	0,87
Low expectations from international market	EB14	1,64	0,634	0,62
Company size	CS	2,29	0,732	0,98
Managers' experience	ME	8	0,688	7,36

Source: Authors' calculation

Table 2.

Correlation matrix (N=100)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
EI	1																
EB1	-0,32*	1															
EB2	-0,22*	0,05	1														
EB3	-0,26*	0,03	0,12	1													
EB4	-0,44*	0,08	0,25	0,33*	1												
EB5	-0,34*	-0,02	0,22	0,06	0,01	1											
EB6	-0,25*	0,00	0,12	0,23	0,08	0,22*	1										
EB7	-0,41*	0,01	0,08	0,12*	0,14	0,01	0,00	1									
EB8	-0,31*	0,02	0,31*	-0,01	0,02	0,02	0,01	0,20	1								
EB9	-0,21*	0,03	0,01	0,01	0,00	0,02	-0,14	0,03	-0,05	1							
EB10	-0,33*	0,03	0,41	0,23	0,25	0,24	-0,30	0,11	-0,20	0,18	1						
EB11	-0,22*	-0,15	0,01	-0,01	0,02	-0,02	0,02	0,01	0,00	0,01	0,03	1					
EB12	-0,46*	0,35	0,12	0,11	0,09	-0,08	0,17	0,09	0,11	0,10	0,05	0,04	1				
EB13	0,32*	0,12	-0,01	-0,02	-0,01	-0,20	-0,03	0,01	0,12	-0,10	0,11	0,04	0,06	1			
EB14	0,54*	0,09	0,15	-0,18	0,23*	0,26*	0,21*	0,13	0,17	0,16	0,12	0,10	0,15	0,21	1		
CS	0,28*	-0,25	-0,21	0,04	0,03	-0,12*	0,17	-0,23*	0,05	0,06	0,01	0,01	0,00	0,12*	0,31	1	
ME	0,36*	-0,14	-0,22	0,12	0,26	-0,41*	0,18	0,19	-0,25*	0,02	0,01	0,13	0,21	0,30	0,01	0,42*	1

p<0,05

Source: Authors' calculation

All the values Cronbach's alpha if item deleted were between 0.625 and 0,873, indicating high reliability and consistency for the entire scale (0.6 is the lower limit for Cronbach's alpha).

Spearman's rho coefficients of the variables are presented in Table 2. It can be observed that all the variables included are significant.

An exploratory factor analysis was undertaken in order to reduce the data into a few underlying categories (Table 3). The categories were thereafter exposed to further analysis. To conduct factor analysis, it was initially determined by Kaiser-MayerOlkin (KMO) measure and Bartlett's test that the number of data is suitable for factor analysis. KMO measure in this study was 0.729 and the value of the significance of the statistic of Bartlett's test which is an approximation of χ^2 statistic is less than 5%, namely 0.00 which shows that factor analysis is suitable for identifying the studied structure.

Table 3.

Exploratory factor analysis (N=100)

Export barriers	Factors			
	1	2	3	4
Insufficient target market information	0,728	0,266	0,077	0,002
Different customer culture	0,655	0,144	0,021	0,024
Access to foreign distribution channels	0,889	0,009	0,004	0,001
Shortage of skilled export staff	0,104	0,802	0,322	0,125
Lack of government assistance	0,422	0,001	0,928	0,009
Unfamiliar export procedures	0,002	0,741	0,001	0,245
Tariff and non-tariff barriers	0,091	0,202	0,116	0,832
Special quality standards	0,833	0,112	0,020	0,333
Uncompetitive prices	0,344	0,315	0,045	0,826
High foreign competition	0,768	0,029	0,107	0,121
Exchange rate	0,226	0,102	0,010	0,744
Expensive bank loans	0,001	0,267	0,313	0,642
Focus on home market	0,020	0,712	0,295	0,168
Low expectations from international market	0,211	0,687	0,129	0,187
Eigen values	3,503	2,015	1,417	2,009
Percentage of variance explained	38,22	17,54	10,16	16,52

Principal Component Analysis; Rotation method: Varimax with Kaiser Normalization; A rotation converged in 6 iterations

Source: Authors' calculation

The results of the explanatory factor analysis showed that the 14 identified export barriers could be reduced to four underlying categories with Eigen values of at least one, for which a proper name was selected according to the content of the loaded variables in each category. Items loading at least 0.5 were considered practically significant (Hair, Anderson, Tatham, and Black,

2005); these items were used to form the components of each category. The categories are: external environment factor; organization and commitment; governmental factor and financial factor. As illustrated in table 3, the external environment factor includes insufficient target market information, different customer culture, access to foreign distribution channels, special quality standards and high foreign competition. This is the bigger category and accounted for 38,22% of the total variance. The organization and commitment has four variables and accounted for 17.54% of the total variance. Shortage of skilled export staff, unfamiliar export procedures, focus on home market and low expectations from international market were loaded under the organization and commitment category. Only one variable was loaded under the governmental factor: lack of government assistance. The governmental factor accounted for 10,16% of the total variance - the lowest amount of all the categories. The financial factor has four variables: tariff and non-tariff barriers, uncompetitive prices, unfavourable foreign exchange rates and expensive bank loans accounted for 16.52% of the total variance.

Four categories together accounted for 81.22% of the total variance. Total variance can be used as the total validity measure of the model.

Next step was evaluating the influence of control variables using hierarchical multiple regression analysis (Table 4). The analysis was performed in three steps. In the first step, the categories of the export barriers were introduced (Model 1). In the second step the control variable company size was added (Model 2). In the third model, the fullest version, managers' experience was added (Model 3).

Table 4.

Results of regression analysis (N=100)

	Model 1	Model 2	Model 3
External environment	-0,747*	-0,761*	-0,302
Organization and commitment	-0,326*	-0,455*	0,036
Governmental factor	-0,524*	-0,497*	-0,429*
Financial factor	-0,413*	-0,388*	-0,369
Company size		0,326*	0,318*
Managers' experience			0,422*
R ²	0,235	0,241	0,327
R ² adjusted	0,232	0,238	0,318
R ² change	-	0,005	0,08
F statistics	7,288*	10,452*	9,882*

Note: Dependent variable is export intensity. * $p < 0,05$

Source: Authors' calculation

Model 1 represents evidence of statistically significant relationships between the export intensity and all categories. In all three models the negative

impact of the export barriers categories on export intensity can be noticed. External environment has the worst impact on export intensity in Model 1 (beta = -0,747, sig. = 0,000) and Model 2 (beta = -0,761, sig. = 0,000). Regarding control variables, company size does not influence the relationship between export intensity and barrier categories. It can be observed that beta values do not change dramatically between Models 1 and 2. Additionally, R^2 value is also practically the same with the change of only 0,5% of the variance explained. Notably, company size influences export intensity directly (beta= 0,326, sig. = 0.001).

However, managers' experience does influence the relationship between external environment and export intensity because beta is much lower and insignificant in Model 3. Similar results were obtained with organizational commitment and financial factor. That reflects on R^2 and R^2 change values which are noticeably higher. This means that managers' experience explains 8% of total variance, so the model is better explained with this control variable. Just as company size, managers' experience is positively related to export intensity (beta= 0,422, sig. = 0,004).

5. DISCUSSION

In this paper we have examined the relationship between the perceived barriers to commercial activity abroad and export intensity. The findings suggest that this approach explains the export intensity of Croatian manufacturing companies.

It has been proven that the relationship between export barriers and export intensity is negative and significant. In order to perform the research, 14 export barriers have been chosen, taking into account literature review and the results from the preliminary research. Explorative and confirmative factorial analysis categorized them into four groups: external environment factor; organization and commitment; governmental factor and financial factor.

According to the results of the analysis, external environment dimension acts as the biggest obstacle for successful export performance. External environment consists of the following barriers: insufficient target market information, different customer culture, access to the foreign distribution channels, special quality standards and high foreign competition. Croatian exporters lack adequate information about foreign markets. Since the foreign market research requires much financial resources, they have to rely on secondary information that is not always suitable for tailoring marketing strategy. This is supported by the information obtained from the questionnaire: only 4% of the respondents have a department for international markets. Distribution of the exported products is also a big challenge. Distribution network requires not only financial resources, but also international experience and personal connections. For this reason inexperienced companies begin their export activities through the middleman (Kneller and Pisu, 2011). When exporting to developed countries,

required quality standards become areal obstacle. On the other hand, high quality products may be a tool for achieving competitiveness in the foreign market. Export success depends on the ability to create and implement adequate competitive strategy (Liargovas and Skandalis, 2008). Different customer culture is recognized as the least serious obstacle for international business. One of the reasons lies in the fact that Croatian exporters operate mainly in the neighbouring markets (Statistical Yearbook, 2014, 2015) where consumer habits are well known or are similar to domestic ones.

Croatian exporters see government assistance as an important barrier for successful export activity. This finding coincides with Shirokova and Tsukanova, (2013). None of the respondents in this research stated that they had received government help in any form. Governmental passivity can be very discouraging for the exporters in the early stage of the internationalization. Government assistance may be offered in a variety of forms, financial and non-financial. Government institutions could be the mediator in the pursuit for international partners or could facilitate international promotion of Croatian products. Government financial help in the form of export subsidies or tax relief could result in price competitive advantage on the foreign market.

When considering price competitiveness, financial category is brought to attention. Financial category consists of tariff and non-tariff barriers, uncompetitive prices, unfavourable foreign exchange rates and expensive bank loans. Uncompetitive prices are not the consequence of governmental passivity alone, but also of the poor cost management, lack of economy of scale, low productivity and expensive bank loans (Jalali, 2013). Since entering the EU, tariff barriers have been reduced but non-tariff barriers remained. However, tariff barriers still hinder the exporters who operate outside of the EU. Unfavourable exchange rates, especially HRK/EUR are perceived as a huge obstacle for Croatian exporters because they make Croatian goods more expensive.

The last category of export barriers is organization and commitment. It consists of the following items: shortage of skilled export staff, unfamiliar export procedures, focus on home market and low expectations from the international market. Staff unqualified in exporting is the most critical component of this category. It is believed that marketing expertise is one of the discriminating factors between high and low performing companies in export markets (Koksal and Kettaneh, 2011). Companies should try to develop their employees' skill in finding the available export opportunities as well as development knowledge about exporting process (Jalali, 2013). Focus on home market reflects on the fact that few sample companies have at least one employee dedicated only to export operations. This is evidence of poor commitment to international business. Low expectations from the international market are usually the consequence of the lack of key information about opportunities in the foreign markets and the benefits of export activities. That brings us back to the first category of export barriers, namely external environment, and the circle of obstacles is closed.

Additionally, the effect of control variables has been evaluated. It has been proved that the size of the company does not influence the relationship between export barriers and export intensity. The same results were obtained by Castillo et al. (2013) and Shirokova and Tsukanova, (2013). Big companies have more resources available in comparison to SMEs, but SMEs are more flexible than large companies. On the other hand, managers' experience influences the relationship mentioned. Knowledge accumulated during the years, gives managers the ability to overcome many barriers, especially the ones regarding information about foreign markets, international business contacts and familiarity with export procedures. The most important experience leverage is the ability to see and exploit the opportunity in the foreign market and to recognize new trends and adapt marketing strategy accordingly.

6. CONCLUSION AND IMPLICATIONS FOR FURTHER RESEARCH

This paper has provided evidence that Croatian exporters perceive exporting barriers as the limiting factor for developing international activities. Some obstacles are nested within the company and company may make an effort to eliminate them. Those are organizational issues like poorly skilled staff, low commitment for international business; focusing on home market etc. Other barriers come from the outside of the company, either from home or international environment. Those barriers represent a challenge for the companies to overcome in developing and implementing export strategies.

Special emphasis should be put on the government's role in facilitating export activities for Croatian companies. Government should not be a barrier, but an active assistance that is available to anyone with export orientation.

The findings reported in this paper are generally consistent with the reviewed literature on the subject of detecting key obstacles to export activity.

The paper has obvious limitations. The research has covered only a few industries of the manufacturing sector. Producers of industrial goods were omitted. It would be interesting to compare the perceived export barriers between the producers of the consumer and industrial goods. Agricultural sector is also a good candidate for research in this context due to its export potentials.

It is common perception that export is the first phase of internationalization and, in comparison to other alternatives such as greenfield investment, less exposed to risk. However, this does not mean that export problems should be ignored. Moreover, they should remain the subject of further academic debates as well as government policies.

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**UTJECAJ PERCIPIRANIH IZVOZNIH PREPREKA NA
INTENZITET IZVOZA KOD HRVATSKIH
PROIZVOĐAČA*****Sažetak***

U radu se istražuje utjecaj percipiranih prepreka izvoza na intenzitet izvoza. Istraživanje je provedeno na uzorku od 100 hrvatskih proizvodnih poduzeća. Nakon proučavanja literature i empirijskog istraživanja, identificirano je 14 prepreka koje u najvećoj mjeri ograničavaju izvozne aktivnosti. Faktorskom analizom, izvozne prepreke kategorizirane su u četiri skupine: vanjsko okruženje, organizacija i posvećenost, utjecaj države te financijska ograničenja. Istraživanje je potvrdilo da iskustvo i znanje može smanjiti negativan utjecaj ograničenja izvoza i povećati sposobnost prepoznavanja poslovnih prilika na inozemnom tržištu.

Ključne riječi: internacionalizacija, izvozne prepreke, izvozni intezitet, iskustva menadžera.

JEL klasifikacija: F10, F14

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NEZAPOSLENOST MLADIH I USKLAĐENOST OBRAZOVNOG SUSTAVA S POTREBAMA TRŽIŠTA RADA

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Sažetak

Hrvatska se već godinama suočava s visokom nezaposlenošću mladih (oko 43 % u 2015.) te sve većim udjelom obeshrabrenih. Nezaposlenost mladih u EU, a posebno u Hrvatskoj zabrinjava jer je gotovo trostruko veća od ukupne stope nezaposlenosti te daleko viša od prosjeka EU gdje iznosi oko 20 %. U radu se analizira neaktivnost mladih putem tzv. NEET skupine, čiji udio je alarmantan u Bugarskoj, Cipru, Grčkoj, Hrvatskoj i Španjolskoj. Većina mladih osoba nema ni niži srednjoškolski stupanj obrazovanja te rano napušta sustav obrazovanja i treninga. Prelazak iz sustava obrazovanja na tržište rada nije jednostavan, a prosječno prijelazno razdoblje do prvog značajnog posla na području EU traje oko 6,5 mjeseci. S obzirom na istovremeno sudjelovanje mladih u procesu obrazovanja i na tržištu rada razlikuje se pet grupa zemalja. Neusklađenost tržišta rada i obrazovnog sustava posebno je izražena u Hrvatskoj, a sve više zabrinjava porast nezaposlenih mladih osoba s najvišim stupnjem obrazovanja.

Ključne riječi: tržište rada, nezaposlenost mladih, NEET skupina, obrazovni sustav.

1. UVODNO

Pojava nezaposlenosti i u najrazvijenijim zemljama svijeta istovremeno predstavlja i ekonomski i društveni problem. Naime, tijekom razdoblja visoke

nezaposlenosti, javljaju se ekonomske poteškoće koje se prenose i štetno djeluju na osjećaje ljudi, život obitelji, ali i trošak društva.

Od početka 1990-ih godina uz visoku stopu nezaposlenosti, hrvatsko tržište rada karakterizira i niska stopa ekonomske aktivnosti stanovništva. Istovremeno, postoji problem dugotrajne nezaposlenosti i visoke strukturne neusklađenosti između ponude i potražnje radnih mjesta. Zbog razmjerno velikog udjela neslužbenog gospodarstva, postoji relativno velika razlika između administrativnog i anketnog evidentiranja nezaposlenosti. Opadajuće stope zaposlenosti povezane su s porastom otvorene nezaposlenosti i rastućom ekonomskom neaktivnošću, ranijim odlaskom u mirovinu, rastućim brojem socijalnih naknada za invalide i branitelje, rastućim udjelom neslužbenog gospodarstva, te porastom efekta obeshrabrenih radnika. Nakon šest uzastopnih godina gospodarskog pada od početka ekonomske krize, od 2015. godine Hrvatska ponovno ostvaruje pozitivne stope rasta. Oporavak BDP-a utjecao je i na smanjivanje stope nezaposlenosti, koja se prema procjenama DZS-a i HZZ-a za 2016. godinu kreće oko 15 %.

U Hrvatskoj poseban problem predstavlja nezaposlenost mladih osoba (15 – 24 godine¹). I u drugim zemljama regije, a i šire, nezaposlenost mladih (do 25 godina) postaje ozbiljan problem. Niska potražnja na tržištu rada i obeshrabrenost u pogledu nalaženja zaposlenja potaknuli su mlade osobe u Hrvatskoj da se povuku s tržišta rada ili da na njega ne ulaze. Zbog toga su se neke mlade osobe odlučile ostati dulje u sustavu obrazovanja, a drugi su, nažalost, postali dio sve brojnije skupine mladih koji se ne obrazuju, ne rade niti se stručno usavršavaju (engl. NEET – *Not in Education, Employment, or Training*). Hrvatska jasno pokazuje kako se nalazi među zemljama koje imaju najveći problem sa skupinom mladih osoba koje nisu nezaposlene, a nisu ni u sustavu obrazovanja i osposobljavanja.

Stoga se u ovom radu analizira nezaposlenost mladih osoba u Hrvatskoj u usporedbi s ostalim zemljama Europske unije. Upozorava se na proces tranzicije iz sustava obrazovanja na tržište rada te načine smanjivanja neusklađenosti obrazovnog sustava i potreba na tržištu rada na razini tercijarnog stupnja obrazovanja. Analitički se propitkuje jeli danas u Hrvatskoj visoka razina obrazovanja garancija u borbi protiv nezaposlenosti te se navode postojeće mjere aktivnih politika zapošljavanja koje su usmjerene prema mladim osobama.

2. ANALIZA NEZAPOSLENOSTI MLADIH HRVATSKE U ODNOSU PREMA ODABRANIM ZEMLJAMA EU

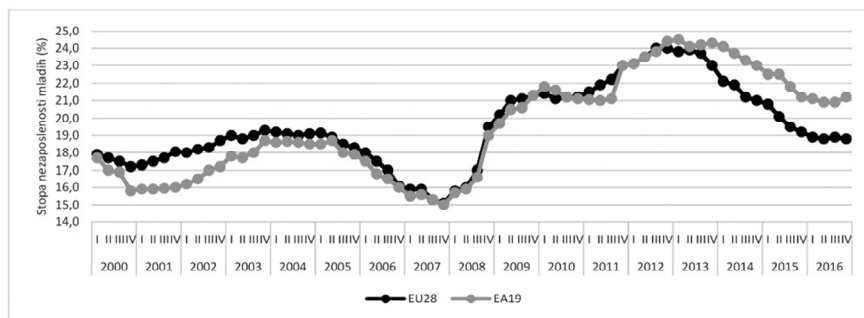
Stope nezaposlenosti mladih općenito su dvostruko (a ponegdje i više) veće od ukupne stope nezaposlenosti. Hrvatska se od početka tranzicije suočava s vrlo visokom stopom mladih nezaposlenih osoba (15 - 24 godine), no ta brojka je dodatnonarasla od početka gospodarske krize. Ekonomska kriza je posebno pogodila

¹ U Hrvatskoj se kategorija mladih često proširuje i do 29 godina s obzirom da je veliki broj mladih i dulje uključen u sustav obrazovanja.

mlade. Od drugog tromjesečja 2008., stopa nezaposlenosti mladih na razini EU-28 je porasla za čak 8 % bodova te je u prvom tromjesečju 2013. iznosila 23,9 %, a početkom 2016. oko 20 %, što znači da svaka peta mlada osoba (u radnoj snazi) nije bila zaposlena, već je tražila posao (Eurostat, 2017).

2.1. Utjecaj krize na ukupnu stopu nezaposlenosti mladih

Tijekom krize mnogi su radnici ušli u različite oblike ranjivih skupina zaposlenosti, smanjio se broj „pristojnih“ radnih mjesta, a značajno povećao broj nesigurnog zapošljavanja te broj radnika s niskim primanjima (Obadić, 2011, str. 96). Skupina mladih je posebno ranjiva u takvim trenucima ekonomskih šokova kada su radni uvjeti posebno neizvjesni. Oni se nalaze u prijelaznom razdoblju, nedostaje im profesionalnog iskustva, a ponekad i odgovarajućeg znanja i obrazovanja. Iako postoje razlike među zemljama članicama, situacija je slična i u članicama Europske unije (EU-28), odnosno Europske monetarne unije (EA-19) (vidi grafikon 1).



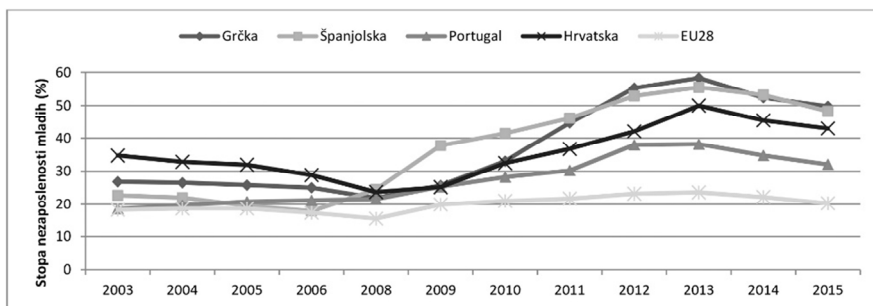
Grafikon 1. Stope nezaposlenosti mladih, EU28 i EA19, sezonski prilagođeno, 2000. - 2016.

Izvor: Eurostat (2017).

Od početka promatranog razdoblja, nezaposlenost mladih na području EU-28 bila je sustavno viša, nego na području eurozone sve do sredine 2007. godine. Otad pa do trećeg tromjesečja 2010. godine ove dvije stope su se kretale vrlo blizu jedna drugoj. Nakon toga nezaposlenost mladih je do sredine 2011. bila viša u euro području, a zatim su se do kraja 2012. godine kretale paralelno. Od sredine 2012. godine stopa nezaposlenosti mladih eurozone veće su od stope nezaposlenosti mladih na području EU-28. Spomenuti jaz povećao se tijekom 2013. te je tijekom 2016. kontinuirano iznosio dva postotna boda.

Detaljnija analiza po zemljama pokazuje da je od sredine 2012. stopa nezaposlenosti mladih značajnije porasla na euro području u odnosu prema EU-28, prvenstveno zbog značajnijeg porasta nezaposlenosti mladih u Grčkoj. Sljedeći grafikon prikazuje trendove nezaposlenosti mladih u odabranim zemljama EU koje su

danas najviše pogođene tim problemom - Grčka, Španjolska, Hrvatska, ali i Italija (40,3 % u 2015.).



Grafikon 2. Stopa nezaposlenosti mladih u odabranim zemljama (15-24), 2003.-2015., (%)

Izvor: Eurostat (2016a).

Očito je kako je nezaposlenost mladih najviše izražena u mediteranskim zemljama (posebno u Grčkoj i Španjolskoj), time i Hrvatskoj koja je u odabranoj skupini zemalja imala najvišu stopu nezaposlenosti mladih u 2007. Jedina članica EU u kojoj je stopa nezaposlenosti mladih ispod 10 % je Njemačka (7,2 % 2015.). Najviša razina nezaposlenosti mladih u Hrvatskoj ostvarena je 2013. godine (50 %). Otad se ipak počela smanjivati (Eurostat, 2016a.). Vjeruje se da su tome pridonijele i mjere politika zapošljavanja. Naime, tijekom 2012. godine EU je pokrenula inicijativu „Mogućnosti za mlade“. Europska se komisija posebno usredotočila na one države članice s najvišom stopom nezaposlenosti (30 % i više). Kako bi se problem nezaposlenosti mladih mogao rješavati kao prioritetno pitanje, s tim zemljama postignuti su sporazumi o najboljim načinima preuzimanja i korištenja nepotrošenih sredstava EU-a.

U prosincu 2012. Europska komisija je donijela paket mjera za zapošljavanje mladih, među kojima se, posebno Garancijom za mlade (engl. *Youth Guarantee*), mladima do 25 godina osigurava da u roku od četiri mjeseca nakon što završe formalno obrazovanje ili izgube posao pruži kvalitetna ponuda za posao, kontinuirano obrazovanje ili stažiranje (Europska komisija, 2013, str. 10). To je novi pristup u rješavanju pitanja nezaposlenosti mladih osoba, kojim se sve osobe mlade od 25 godina (u RH mlade od 30 godina!) nastoji što brže aktivirati na tržištu rada (Official Journal of the EU, 2013).

Visoke stope nezaposlenosti mladih pokazuju sve veće poteškoće s kojima se suočavaju mlade osobe na europskom tržištu rada. Međutim, treba istaknuti da to nužno ne znači da je broj nezaposlenih mladih osoba između 15 i 24 godine velik, jer je većina uključena u sustav visokog obrazovanja, ne rade, ne traže posao pa se zbot toga ne ubrajaju u radnu snagu koja se koristi za izračunavanje stope nezaposlenosti mladih osoba (broj nezaposlenih mladih podijeljen s brojem mladih aktivnih osoba (zaposleni + nezaposleni) na tržištu rada). Tako npr., stope nezaposlenosti od 25 % ne znači da je „1

od 4 mlade osobe nezaposlena⁴. To je uobičajena zabluda. Naime, stopa nezaposlenosti mladih može biti visoka čak i ako je broj nezaposlenih ograničen ($u=U/L$). To može biti kada je brojnost radne snage mladih (nazivnik) relativno mala. To nije problem za ukupnu stopu nezaposlenosti zbog većeg udjela te populacije na tržištu rada.

Zato je mnogo bolje koristiti se još jednom mjerom kojom se koristi Eurostat, omjer nezaposlenosti mladih (broj nezaposlenih mladih od 15 do 24 podijeljen s ukupnom populacijom mladih u dobi od 15 do 24). Omjer nezaposlenosti mladih je prema definiciji uvijek manji od stope nezaposlenosti mladih i to uobičajeno za pola manji, a ta razlika u potpunosti proizlazi iz različitih nazivnika. Tablica 1 pokazuje kako su omjeri nezaposlenosti mladih u EU znatno niži od stopa nezaposlenosti mladih, iako su i oni porasli od početka ekonomske krize 2008. godine.

Tablica 1.

Nezaposlenost mladih u EU-28 (%)

	Stopa nezaposlenosti mladih				Omjer nezaposlenosti mladih			
	2012.	2013.	2014.	2015.	2012.	2013.	2014.	2015.
EU28	23,3	23,7	22,2	20,3	9,8	9,9	9,1	8,4
EA	23,5	24,4	23,8	22,4	9,6	9,8	9,4	8,8
Belgija	19,8	23,7	23,2	22,1	6,2	7,3	7	6,6
Bugarska	28,1	28,4	23,8	21,6	8,5	8,4	6,5	5,6
Češka	19,5	18,9	15,9	12,6	6,1	6	5,1	4,1
Danska	14,1	13	12,6	10,8	9,1	8,1	7,8	6,7
Njemačka	8	7,8	7,7	7,2	4,1	4	3,9	3,5
Estonija	20,9	18,7	15	13,1	8,5	7,4	5,9	5,5
Irska	30,4	26,8	23,9	20,9	12,3	10,6	8,9	7,6
Grčka	55,3	58,3	52,4	49,8	16,1	16,5	14,7	12,9
Španjolska	52,9	55,5	53,2	48,3	20,6	21	19	16,8
Francuska	24,4	24,8	24,1	24,7	8,9	8,9	8,5	9,1
Hrvatska	42,1	50	45,5	43	12,7	14,9	15,3	14,3
Italija	35,3	40	42,7	40,3	10,1	10,9	11,6	10,6
Cipar	27,7	38,9	35,9	32,8	10,8	14,9	14,5	12,4
Latvija	28,5	23,2	19,6	16,3	11,5	9,1	7,9	6,7
Litva	26,7	21,9	19,3	16,3	7,8	6,9	6,6	5,5
Luksemburg	18	16,9	21,2	17,3	5	4	6	6,1
Mađarska	28,2	26,6	20,4	17,3	7,2	7,3	6	5,4
Malta	14,1	13	11,8	11,8	7,2	6,9	6,2	6,1
Nizozemska	11,7	13,2	12,7	11,3	6,6	7,7	7,1	7,7
Austrija	9,4	9,7	10,3	10,6	5,6	5,7	6	6,1
Poljska	26,5	27,3	23,9	20,8	8,9	9,1	8,1	6,8
Portugal	38	38,1	34,7	32	14,1	13,3	11,9	10,7
Rumunjska	22,6	23,7	24	21,7	6,9	7,1	7,1	6,8
Slovenija	20,6	21,6	20,2	16,3	7,1	7,3	6,8	5,8
Slovačka	34	33,7	29,7	26,5	10,4	10,4	9,2	8,4
Finska	19	19,9	20,5	22,4	9,8	10,3	10,7	11,7
Švedska	23,7	23,6	22,9	20,4	12,4	12,8	12,7	11,2
UK	21,2	20,7	16,9	14,6	12,4	12,1	9,8	8,6

Izvor: Baza podataka Eurostat (pristupljeno: 30.11.2016.)

Povijesno je poznato da su žene ranjivija skupina na tržištu rada od muškaraca te su jače pod utjecajem nezaposlenosti od muškaraca. U 2000. godini stopa nezaposlenosti žena u EU-28 je bila oko 10 %, dok je ona za muškarce bila ispod 8 %. Od 2013. godine obje stope počele su opadati i krajem 2015. su iznosile 8,9 %, odnosno 9,2 % (Eurostat, 2016a).

Sljedeća tablica prikazuje kretanja stope nezaposlenosti po dobi i spolu prije krize (2007.) i u 2015. godini.

Tablica 2.

Stope nezaposlenosti po dobi i spolu, (%)

	Muškarci		Žene		< 25 godina	25-74 god.
	2007.	2015.	2007.	2015.	2015.	2015.
EU28	6.6	9.3	7.9	9.5	20.3	8.3
EA	6.7	10.7	8.5	11.0	22.4	9.8
Belgija	6.7	9.1	8.5	7.8	22.1	7.3
Bugarska	6.5	9.8	7.4	8.4	21.6	8.4
Češka	4.2	4.2	6.7	6.1	12.6	4.5
Danska	3.4	5.9	4.2	6.4	10.8	5.3
Njemačka	8.4	5.0	8.7	4.2	7.2	4.4
Estonija	5.4	6.2	3.8	6.1	13.1	5.6
Irska	5.0	10.9	4.3	7.7	20.9	8.4
Grčka	5.3	21.8	12.9	28.9	49.8	23.4
Španjolska	6.4	20.8	10.7	23.6	48.3	20.2
Francuska	7.6	10.8	8.5	9.9	24.7	8.9
Hrvatska	8.8	15.7	11.4	17.0	43.0	13.8
Italija	4.9	11.3	7.8	12.7	40.3	10.0
Cipar	3.4	15.1	4.6	14.8	32.8	13.2
Latvija	6.5	11.1	5.6	8.6	16.3	9.3
Litva	4.2	10.1	4.3	8.2	16.3	8.5
Luksemburg	3.4	5.9	5.1	7.2	16.6	5.5
Mađarska	7.1	6.6	7.7	7.0	17.3	6.0
Malta	5.8	5.5	7.9	5.2	11.8	4.4
Nizozemska	3.3	6.5	5.2	7.3	11.3	6.1
Austrija	4.5	6.1	5.3	5.3	10.6	5.0
Poljska	9.0	7.3	10.3	7.7	20.8	6.4
Portugal	8.7	12.4	9.6	12.9	32.0	11.1
Rumunjska	7.2	7.5	5.2	5.8	21.7	5.6
Slovenija	4.0	8.1	5.9	10.1	16.3	8.4
Slovačka	10.0	10.3	12.8	12.9	26.5	10.2
Finska	6.5	9.9	7.2	8.8	22.4	7.6
Švedska	5.9	7.5	6.5	7.3	20.4	5.6
UK	5.5	5.5	5.0	5.1	14.6	3.8

Izvor: Eurostat (2016a).

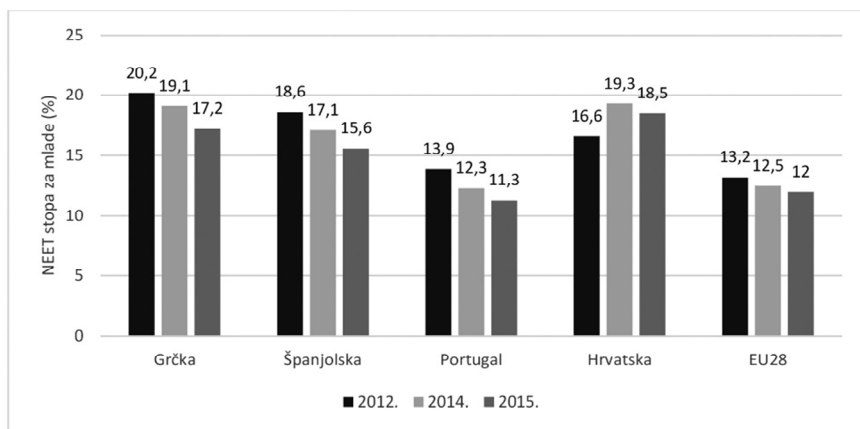
Mlade žene su najčešće i slabije plaćene za istu razinu stručne spreme i složenost poslova koju obavljaju te često nisu u mogućnosti na odgovarajući

način balansirati između svojeg privatnog i poslovnog života te su na taj način izložene riziku diskriminacije (Pološki Vokić, Sinčić Čorić, Obadić, 2016).

2.2. Neaktivnost mladih osoba – bolna točka

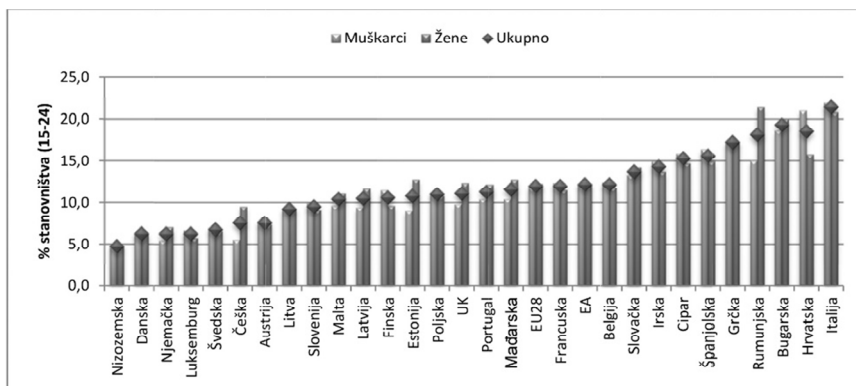
Među mladima na području Europe posebno zabrinjava skupina mladih koji nisu zaposleni, a nisu ni u sustavu obrazovanja i osposobljavanja. To je tzv. NEET (engl. *Neither in employment nor in education or training*) skupina. Većina njih nema čak ni niži srednjoškolski stupanj obrazovanja te rano napušta obrazovanje i trening. Najveći udio takvih čine migranti ili mlade osobe s nepovoljnim naslijeđem (Official Journal of the EU, 2013). Takvo stanje kod mladih osoba može rezultirati trajnim posljedicama, kao što je povećani rizik buduće nezaposlenosti, smanjena razina budućih zarada, gubitak ljudskog kapitala, smanjena motivacija za ostvarivanje obitelji što sve utječe na stvaranje negativnih demografskih trendova na već ionako starom europskom kontinentu.

Udio skupine NEET je alarmantan u pojedinim članicama EU, gdje iznosi preko 16 % (Bugarska, Cipar, Grčka, Hrvatska, Irska, Italija, Rumunjska, Španjolska). Izrazito visoke NEET stope, a posebno njihov uzlazni trend je zabrinjavajući u Hrvatskoj (vidjeti grafikon 3).



Grafikon 3. Mlade osobe koje nisu zaposlene i nisu uključene u sustav obrazovanja i treninga u odabranim zemljama (NEET) (15-24), odabrane godine
Izvor: Baza podatka Eurostat (pristupljeno: 13.10.2016.)

Neuključivanje mladih ljudi u tržište rada predstavlja velike troškove za svaku državu. Procjene Eurofound-a² pokazuju kako su u 2008. godini troškovi nezaposlenosti mladih ili njihove neaktivnosti (tj. troškovi NEET skupine) na području EU-26 iznosili oko 120 milijardi eura odnosno 1,21 % BDP-a, a u 2011. je taj trošak iznosio oko 153 milijarde eura odnosno 1,2 % BDP Europske unije. Ponovna reintegracija u zaposlenost samo 10 % tih mladih ljudi stvorila bi godišnji dobitak više od 15 milijardi eura (Eurofound, 2012). Sljedeći grafikon prikazuje nezaposlenost NEET skupine po spolu u 2015. godini.



Grafikon 4. NEET po spolu u EU28 (15-24), 2015. (%)

Izvor: Baza podatka Eurostat (pristupljeno: 13.11.2016.)

Hrvatska jasno pokazuje kako se nalazi među zemljama koje imaju najveći problem sa skupinom mladih osoba koje nisu niti zaposlene niti su u sustavu obrazovanja i osposobljavanja. Kao i u ostalim mediteranskim zemljama može se primijetiti manji udio žena u toj dobi, što se može objasniti činjenicom kako se sve veći broj mladih djevojaka u Hrvatskoj odlučuje za razne oblike obrazovanja.

2.3. Sudjelovanje mladih u obrazovanju i na tržištu rada

Tranzicija iz sustava obrazovanja na tržište rada nije jednostavna. U nekim zemljama, mladi ljudi počinju raditi mnogo ranije nego u nekim drugim (u obliku ljetnih ili studentskih poslova). Moguće je istovremeno biti i u sustavu obrazovanja i na tržištu rada što dovodi do preklapanja. U dobi od 15 godina, gotovo je 100 % populacije na području EU u sustavu obrazovanja. Kako mladi

²Eurofound – The European Foundation for the Improvement of Living and Working Conditions. Detaljnije vidjeti na: <http://www.eurofound.europa.eu/>

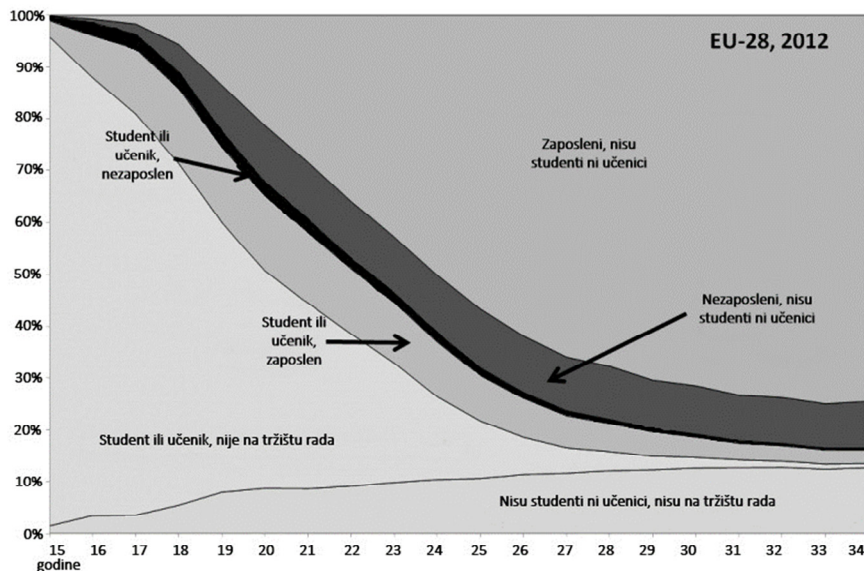
stare, javlja se postepeno smanjenje udjela mladih u sustavu obrazovanja. Ne napuštaju obrazovanje svi odjednom te tako postoji postepeni prijelaz za mlade. Njihova dinamika napuštanja sustava obrazovanja određena je nacionalnim sustavom obrazovanja i treninga.

Paralelno sa smanjivanjem udjela mladih u obrazovanju, povećava se udio zaposlenih i nezaposlenih na tržištu rada. Tempo izlaska iz sustava obrazovanja nije jednak tempu ulaska na tržište rada s obzirom da je jedan dio ljudi istovremeno u obrazovanju i na tržištu rada, dok ostali izlaze iz sustava obrazovanja i ostaju izvan tržišta rada. Postoje brojne situacije u kojima se sudjelovanje mladih u obrazovanju i na tržištu rada preklapaju. Preklapanje se može dogoditi bilo kada tijekom života, ali je češće u mladih zbog njihove tranzicije iz sustava obrazovanja na tržište rada.

Za neke mlade ljude zaposlenost je podređena obrazovanju, npr, u primjeru studenata koji rade svega nekoliko sati na tjedan. Drugi su zaposleni te su samo granično u obrazovanju, npr. netko tko je zaposlen, ali je uključen u povremeno stručno usavršavanje ili netko tko studira nakon posla kako bi se kvalificirao za diplomu. Obrazovanje i posao mogu se odvijati u različito vrijeme u godini (npr. studenti tijekom akademske godine najčešće rade ljetne poslove) ili paralelno (npr. studenti koji rade vikendom ili navečer nakon predavanja). Ista aktivnost može se vrednovati i kao obrazovanje i kao zaposlenost, npr. većina formalnog obrazovanja u sekundarnom obrazovanju, plaćeno praktično obrazovanje ili posebne faze strukovnog obrazovanja integrirane u neke studijske programe u tercijarnom obrazovanju. U skladu s pravilima Međunarodne organizacije rada (engl. *International Labour Organization* – ILO), plaćena praktična izobrazba/obrazovanje smatra se zaposlenošću, a neplaćena izobrazba ne (Eurostat, 2016b).

Prema podacima iz 2009. godine prosječno prijelazno razdoblje od inicijalnog obrazovanja do prvog značajnog posla trajalo je 6,5 mjeseci u EU-27. Trajanje se značajno razlikuje ovisno o zemlji i o razini obrazovanja – od 5 mjeseci za visokoobrazovane do 10 mjeseci za one s nižim kvalifikacijama (Eurostat, 2012). Neke zemlje su bolje od prosjeka EU (6,5 mjeseci) – Island (prosječno vrijeme tranzicije 3,3 mjeseca), Nizozemska i UK (3,5 mjeseca), Irska (4,3 mjeseca) i Švedska (4,4 mjeseca). Prosječna dob izlaska iz formalnog obrazovnog sustava je 21 (pri čemu 17 godina za niže srednjoškolsko obrazovanje i 24 za visoko obrazovanje), (Eurostat, 2012).

Sljedeći grafikon detaljnije dezagregira status mladih osoba, razlikujući plaćene od neplaćenih u članicama EU-28. Oni koji su u obrazovanju obojani su crnom i sivom bojom različitog intenziteta, ovisno o njihovom statusu na tržištu rada, dok se oni koji nisu u obrazovanju nalaze u desnom dijelu grafikona i obojani su bijelom bojom. Važno je primijetiti da ne postoje preklapanja između zaposlenosti i nezaposlenosti, jer osoba ne može biti istovremeno zaposlena i nezaposlena.

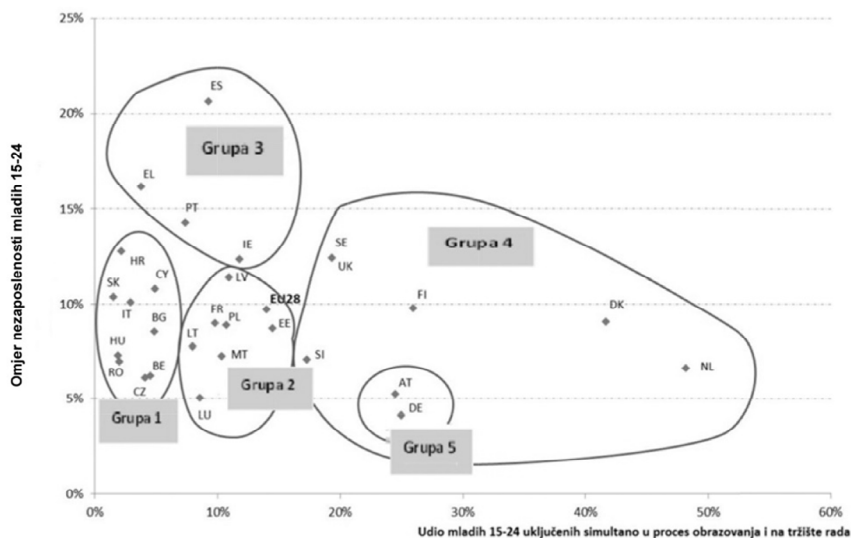


Grafikon 5. Struktura mlađe populacije prema statusu obrazovanja i uključenosti na tržište rada, EU-28, 2012. godina

Izvor: Eurostat(2016b).

Grafikon prikazuje udio mladih ljudi u obrazovanju i na tržištu rada pri svakoj godini te pokazuje da većina mladih nezaposlenih nije u sustavu obrazovanja, ali mnogi jesu (4,3 milijuna i 1,3 milijuna osoba, sve u dobi od 15-24, EU-28, 2012.). Također postoji i veliki broj zaposlenih mladih dok ih je u obrazovanju (6,7 milijuna), (Eurostat, 2016b). Kao što se može primijetiti, postoji više mladih ljudi koji su zaposleni dok su u obrazovanju, nego mladih nezaposlenih (u obrazovanju ili ne).

Postoje značajne strukturne razlike među članicama EU u sudjelovanju mladih na tržištu rada. Razlog je kombinacija institucionalnih faktora (npr. formalne sheme naučavanja), kulturne odrednice, postojanje ili nepostojanje tržišta rada za studente, uloga profesionalnog treninga i dr. Prvi parametar za grupiranje zemalja je istovremeno sudjelovanje mladih u obrazovanju i na tržištu rada, a drugi parametar predstavlja razinu nezaposlenosti mladih, mjerenu kao omjer nezaposlenosti mladih (Eurostat, 2016b). Zbog toga sljedeći grafikon prikazuje stanje u zemljama EU u skladu s te dvije veličine i predlaže moguće klastere zemalja.



Grafikon 6. Grupe zemalja prema istovremenom sudjelovanju osoba u procesu obrazovanja i na tržištu rada

Izvor: Eurostat(2016b).

S obzirom na prethodan grafikon teško je zaključiti da postoji jedinstvena korelacija između ova dva parametra za spomenutih pet grupa zemalja. Ipak, u slučaju grupe tri i grupe pet mogao bi se donijeti zaključak da je nezaposlenost mladih viša u onim zemljama u kojima se mladi rijetko uključuju na tržište rada kada su u sustavu obrazovanja. Kao što je prethodno i istaknuto svaka članica ima specifičnu situaciju te je teško bilo što poopćavati. Sljedeći shematski prikaz sažeto prikazuje karakteristike pojedinih grupa zemalja.

1. grupa	2. grupa	3. grupa	4. grupa	5. grupa
<p>Čine zemlje u kojima je mali broj studenata zaposlen ili nezaposlen. Za zemlje u toj skupini, preklapanje između tržišta rada i obrazovanja je jako malo. To može biti slučaj kada npr. mladi završe studij i tek tada počinju prvi puta tražiti posao te postoji samo nekolicina onih koji rade skraćeno radno vrijeme ili kao studenti rade preko ljeta. Za zemlje u toj grupi karakteristična je visoka stopa nezaposlenosti iako apsolutan broj nezaposlenih mladih nije visok, a razlog je jako malo tržište rada za mlade. Riječ je o grupi zemalja u kojoj malo studenata/učenika istovremeno sudjeluje i na tržištu rada.</p> <p>Zemlje u toj skupini su:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Belgija, Bugarska, Hrvatska, Republika Češka, Mađarska, Italija, Cipar, Rumunjska i Slovačka. 	<p>Ovu skupinu zemalja karakteriziraju dva obilježja: a) umjereno preklapanje između obrazovanja i tržišta rada i b) razina nezaposlenosti mladih oko prosjeka EU.</p> <p><input type="checkbox"/> Također, karakterizira je i činjenica da je broj mladih nezaposlenih osoba u obrazovanju zanemariv u usporedbi sa brojem mladih osoba koje su nezaposlene i nisu u obrazovanju.</p> <p><input type="checkbox"/> Ova grupa obuhvaća Estoniju, Francusku, Latviju, Litvu, Luksemburg, Maltu i Poljsku.</p>	<p>Karakteriziraju: a) skromno preklapanje između obrazovanja i tržišta rada (npr. isto kao i u drugoj grupi); b) vrlo visoka razina nezaposlenosti mladih.</p> <p>To su zemlje koje su ujedno i najviše pogođene krizom.</p> <p>Zemlje u toj skupini su Grčka, Španjolska, Portugal i u nekoj mjeri Irska.</p>	<p>Ovu grupu karakterizira: a) visoko ili jako visoko uključivanje studenata na tržište rada; b) prosječna razina nezaposlenosti. Te zemlje su imale dugotrajnu tradiciju da studenti rade skraćeno ili tijekom ljetnih mjeseci (Nordijske zemlje imaju visoku sezonsku nezaposlenost među studentima kada se otvore ljetna radna mjesta). Neke od tih zemalja poput Nizozemske, imaju dualni sustav studijskih programa u posebnim područjima tercijarnog obrazovanja koje uključuje praktične radne faze.</p> <p>To su: Danska, Nizozemska, Finska, Švedska, UK i u manjoj mjeri Slovenija.</p>	<p>To je posljednja skupina zemalja koje imaju visoku stopu zaposlenosti među onima koji su još u sustavu obrazovanja te gotovo nema nezaposlenosti među onima koji su u obrazovanju. One su uvele sustave naukovanja ili stručnog osposobljavanja na sekundarnoj razini. Navedeno objašnjava visoki udio mladih koji su istovremeno i u sustavu obrazovanja i zaposleni su.</p> <p><input type="checkbox"/> U toj skupini nalaze se Njemačka i Austrija.</p>

Shema 1. Karakteristike pojedinih grupa zemalja u skladu s grafikonom 6

Izvor: Preoblikovano prema Eurostat (2016b).

2.4. Usklađenost hrvatskog tržišta rada i obrazovnog sustava na tercijarnoj razini obrazovanja

Značajno je da su kreatori i nositelji ekonomske politike ipak shvatili da je riječ o strukturnom problemu te se posljednjih godina ipak intenzivnije i sustavnije počelo raditi na rješavanju toga problema, barem na razini tercijarnog stupnja obrazovanja. Tako su na razini visokog obrazovanja po prvi put krajem 2011. godine napravljene upisne kvote prema preporukama Hrvatskog zavoda za zapošljavanje i njihovim stvarnim potrebama koje je prihvatilo Ministarstvo znanosti, obrazovanja i sporta te ih kvantificiralo u suradnji s pojedinim sveučilištima.

Neusklađenost politike obrazovanja i potreba na tržištu rada je strukturni problem koji se ne može riješiti „preko noći“, a dosadašnje analize hrvatskog tržišta rada pokazuju velike neusklađenosti postojećih potreba i ponude odgovarajuće radne snage. U sklopu provođenja mjera aktivnih politika zapošljavanja, Hrvatski zavod za zapošljavanje (HZZ) ujedno se bavi i analizom, procjenama i predviđanjima budućih potreba na tržištu. Suradujući s poslodavcima, odnosno provođenjem anketa, dobivaju se podaci o njihovim

potrebama, prate se određena zanimanja te se definiraju njihovi statusi kao deficitarni ili suficitarni. Izmjenjujući informacije s obrazovnim institucijama i institucijama tržišta rada također se radi na napretku usklađenosti.

Suradnjom čelnih ljudi Ministarstva rada i mirovinskog sustava, Ministarstva znanosti, obrazovanja i sporta, Ministarstva regionalnog razvoja i fondova EU, Vlade te Nacionalnog vijeća za razvoj ljudskih potencijala i sektorskih vijeća, 2012. godine je započelo aktivnije kreiranje smjernica za rješavanje problema neusklađenosti i na nižim razinama obrazovanja. Temelj za rješavanje toga problema svakako leži u izradi Hrvatskog kvalifikacijskog okvira (HKO). Riječ je o instrumentu koji bi trebao osigurati uređenje klasifikacija u Hrvatskoj, prohodnost i kvalitetu kvalifikacija, kao i povezivanje razina kvalifikacija u našoj zemlji s razinama kvalifikacija Europskog kvalifikacijskog okvira. Tako je u veljači 2013. godine usvojen Zakon o Hrvatskom kvalifikacijskom okviru, kojim se uspostavlja Hrvatski kvalifikacijski okvir (HKO) kojim se uređuje sustav kvalifikacija u Hrvatskoj (NN, 2013). Upravo je usklađivanje obrazovanja s potrebama tržišta rada važan element HKO-a.

Zbog toga je u akademskoj godini 2013./2014. porast broja upisnih kvota na Sveučilištu u Zagrebu zabilježen jedino u području biomedicinskih znanosti, i to zbog povećanja broja studenata na Medicinskom i Veterinarskom fakultetu dok je na svim ostalim fakultetima zabilježeno smanjivanje broja upisnih kvota (vidi tablicu 3).

Tablica 3.

Promjena upisnih kvota na Sveučilištu u Zagrebu za odabrane ak.godine

	Visoko učilište	2011./12.	2012./13.	2014./2015.	2015./2016.	2016./2017.	Trend promjene
I.	PODRUČJE PRIRODNIH ZNANOSTI	847	847	819	827	812	
II.	PODRUČJE TEHNIČKIH ZNANOSTI	3.235	3.205	3200	3185	3290	
	Rudarsko - geološko - naftni fakultet	180	170	170	170	170	
	Tekstilno - tehnološki fakultet	445	425	425	385	390	
III.	PODRUČJE BIOMEDICINSKIH ZNANOSTI	720	800	745	745	770	
	Medicinski fakultet	350	410	350	350	350	
	Veterinarski fakultet	130	150	150	150	175	
IV.	PODRUČJE BIOTEHNIČKIH ZNANOSTI	995	955	925	925	925	
	Šumarski fakultet	355	315	310	310	310	
V.	PODRUČJE DRUŠTVENIH ZNANOSTI	4.739	3.977	4590	4630	4705	
	Edukacijsko - rehabilitacijski fakultet	124	144	144	144	144	
	Ekonomski fakultet	1.610	1.350	1310	1235	1310	
	Fakultet organizacije i informatike, Varaždin	870	780	690	690	690	
	Fakultet političkih znanosti	320	280	250	250	250	
	Pravni fakultet	990	658	1223	1223	1223	
	Učiteljski fakultet	570	510	438	503	503	
VI.	PODRUČJE HUMANISTIČKIH ZNANOSTI	1.777	1.719	1680	1671	1670	
	Hrvatski studiji	395	375	314	314	251	
	Katolički bogoslovni fakultet	265	232	240	240	240	
VII.	UMJETNIČKO PODRUČJE	242	-	276	252	262	
	UKUPNO	12.555	11.652	12.401	12.455	12.664	

Izvor: Sveučilište u Zagrebu (2017).

Može se zaključiti kako je u posljednjih pet godina na najvećem sveučilištu u Hrvatskoj najveće smanjenje broja upisanih studenta na području društvenih (2,5 %) i humanističkih znanosti (0,5 %). Manje smanjenje broja upisanih studenta u području prirodnih i tehničkih znanosti dogodilo se na fakultetima za koje je utvrđeno da su se i smanjile potrebe na tržištu rada. Treba također uzeti u obzir da se spomenuta smanjenja ne mogu napraviti „preko noći“ te se postepeno odvijaju posljednjih pet godina i usklađuju s potrebama tržišta.

U odnosu prema prethodnoj akademskoj godini (2015./2016.) ukupna upisna kvota na Sveučilištu u Zagrebu je u akademskoj godini 2016./2017. uvećana za 207 studenata, odnosno 1,66 %, što je u skladu s Ugovorom o sufinanciranju troškova studiranja redovitih studenata i materijalnih troškova Sveučilišta u Zagrebu u ak. god. 2015./2016., 2016./2017. i 2017./2018., na temelju kojega ukupno povećanje kvote ne smije biti veće od 5 %. Tako je na Sveučilištu u Zagrebu osigurana kvota od 12.664 mjesta za upis studenata u I. godinu preddiplomskih i integriranih preddiplomskih i diplomskih studija u ak. god. 2016./2017³.

3. OBRAZOVANJE – NAJBOLJA GARANCIJA U BORBİ PROTIV NEZAPOSLENOSTI?

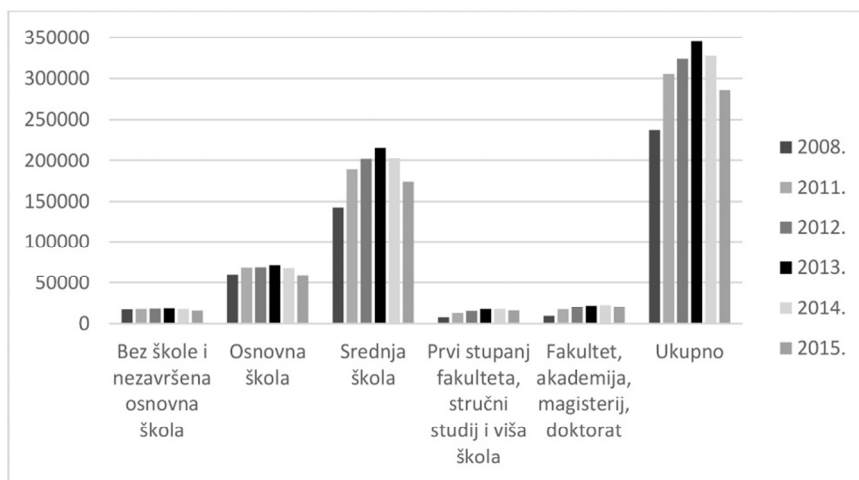
Obrazovanje se općenito smatra infrastrukturnim dobrom koje se javlja kao opći *input* svekolikog razvoja, bilo kroz rastući broj obrazovanih pojedinaca, bilo kroz učinke koje obrazovanje generira na razini pojedinca i društva. S obzirom na efekte koje generira, znanstvenici su skloni obrazovanju dati obilježja onih dobara koja nazivamo zajedničkim imenom javna dobra. Tako shvaćen sadržaj obrazovanja podrazumijeva i njegova temeljna obilježja kao što su nedjeljivost u korištenju, nemogućnost primjene principa tržišnog isključenja, slaba podobnost za namirivanje posredovanjem privatnog tržišta i slično (Barić, Obadić, 2013, str. 58).

Činjenica je da je ipak najbolja garancija protiv nezaposlenosti postignuta razina obrazovanja, s obzirom da nezaposlenost raste što je niži

³ Kvote su u manjoj mjeri uvećane na Prirodoslovno-matematičkom fakultetu (studij Fizika, nastavnički smjer), Fakultetu prometnih znanosti (studij Aeronautika), Fakultetu strojarstva i brodogradnje (studij Strojarstvo), Građevinskom fakultetu (studij Građevinarstvo), Tekstilno-tehnološkom fakultetu, Ekonomskom fakultetu (stručni studij Poslovna ekonomija), Kineziološkom fakultetu (stručni studij) Izobrazba trenera, smjer Kondicijska priprema sportaša), Filozofskom fakultetu (dvopredmetni studiji Portugalski jezik i književnost, Rumunjski jezik i književnost, Španjolski jezik i književnost), Hrvatskim studijima (jednopedmetni studiji Psihologija i Sociologija), Akademiji dramske umjetnosti (studij Produkcija) i na Muzičkoj akademiji (Studij za instrumentaliste, jednopedmetni studij Glazbena pedagogija). Pet sastavnica u manjoj je mjeri smanjilo svoje upisne kvote za ak. god. 2016./2017. Riječ je o Prirodoslovno-matematičkom fakultetu (studij Fizika i tehnika, nastavnički smjer), Kineziološkom fakultetu (stručni studij Izobrazba trenera, smjer Razni sportovi), Filozofskom fakultetu (dvopredmetni studij Anglistika), Fakultet filozofije i religijskih znanosti – FFDI (dvopredmetni studij Filozofija) i Muzičkoj akademiji (dvopredmetni studij Glazbena pedagogija), (Sveučilište u Zagrebu, 2017).

stupanj obrazovanja. Prosječna stopa nezaposlenosti u EU-28, u dobi 25 do 64 koji su završili barem niži stupanj sekundarnog obrazovanja je 17,4 %, što je mnogo više nego stopa nezaposlenosti onih koji su postigli tercijarni stupanj obrazovanja (5,6 %), (Eurostat, 2016a).

Analiza podataka o kretanju nezaposlenih osoba prema stupnju završenog obrazovanja posljednjih godina pokazuje da još uvijek većina nezaposlenih osoba u Hrvatskoj ima niži stupanj obrazovanja, odnosno srednju stručnu spremu ili nižu (vidi grafikon 8).

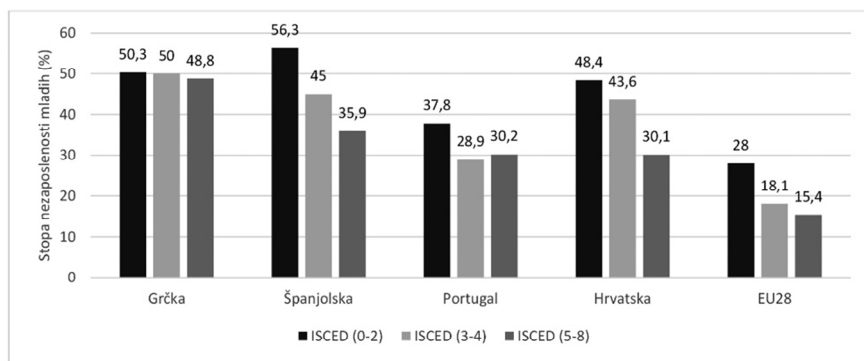


Grafikon 7. Broj nezaposlenih prema razini obrazovanja, odabrane godine

Izvor: Baza podataka HZZ (2016a) Statistika - Registrirana nezaposlenost: Godina - Mjesec, Razina obrazovanja. Link: <http://statistika.hzz.hr/Statistika.aspx?tipIzvjestaja=1> (pristupljeno: 13.10.2016.)

Nezaposlenost je tijekom prethodnih godina porasla u svim obrazovnim grupama, no ipak je najveći relativni porast evidentiran među osobama s najvišim stupnjem obrazovanja. Među osobama sa završenim prvim stupnjem fakulteta, stručnim studijem ili višom školom nezaposlenost je od 2008. do 2015. porasla 108,5 %, a među osobama sa završenim fakultetom, akademijom, magisterijem ili doktoratom 120,7 %. Najmanji porast nezaposlenosti zabilježen je među osobama bez škole i sa završenom osnovnom školom gdje smo imali pad od 7,9 %, odnosno 1,1 %. Takav trend, kada je rast nezaposlenosti najizraženiji među najškoloranijim pojedincima, upozorava na već alarmantno stanje i najbolje pokazuje strukturne probleme neusklađenosti obrazovnog sustava i stvarnih potreba tržišta. S obzirom na prosjek EU-28 (oko 16,5 %), Hrvatska je prošle godine imala visoku stopu nezaposlenosti mladih visokoobrazovanih osoba

(ISCED 5-8)⁴ od 30,1 %, gotovo jednaku kao i Portugal te manju samo od Grčke (48,8 %) i Španjolske (35,9 %), a i udio nezaposlenih visokoobrazovanih osoba u Hrvatskoj u porastu je od nastupanja svjetske ekonomske krize, odnosno od 2008. godine (vidi grafikon 8).



Grafikon 8. Stopa nezaposlenosti mladih prema razini obrazovanja u odabranim zemljama (15-24), 2015., (%)

Izvor: Baza podataka Eurostat; dostupno na:
<http://ec.europa.eu/eurostat/web/youth/data/database> (23.11.2016.)

Upravo zato je primjena HKO-a vrlo važna s obzirom da će poslove oko njegove primjene i razvoja obavljati Ministarstvo znanosti, obrazovanja i sporta u suradnji s Ministarstvom rada koje će prikupljati informacije o sadašnjim i budućim potrebama tržišta rada i potrebnim kompetencijama, a Ministarstvo nadležno za regionalni razvoj će donositi smjernice za razvoj regionalnih tržišta rada te analizirati potrebe za razvojem ljudskih potencijala koje proizlaze iz županijskih/regionalnih razvojnih strategija.

4. POSTOJEĆE POLITIKE ZAPOSŁJAVANJA U HRVATSKOJ NAMIJENJENE MLADIM OSOBAMA

Pojedine mjere aktivne politike zapošljavanja na tržištu rada Hrvatske, kao i u većini novih članica EU još uvijek zaostaju za standardima starih članica EU. „Mjere aktivne politike zapošljavanja u 2015. godini provodile su se na temelju *Smjernica za razvoj i provedbu aktivne politike zapošljavanja u Republici Hrvatskoj u razdoblju od 2015. do 2017. godine* koje je u prosincu 2014. usvojila Vlada RH. Smjernice su se temeljile na prioritetima i ciljevima aktivne politike

⁴ Više o ISCED (engl. *The International Standard Classification of Education*) klasifikaciji vidjeti na: UNESCO (2012).

zapošljavanja definiranim analizom stanja na tržištu rada te strateškim dokumentima RH i EU u području zapošljavanja“ (HZZ, 2016b, str. 31). Intervencije aktivne politike zapošljavanja u 2015. godini, kao i uvijek dosad, razvrstane su po paketima usmjerenim prema specifičnim ciljanim skupinama nezaposlenih osoba te zaposlenih osoba kojima prijete gubitak radnih mjesta. U 2015. godini mjere su tako usmjerene na sedam ciljnih skupina - mlade osobe do 29 godina, dugotrajno nezaposlene osobe, osobe starije od 50 godina, osobe s invaliditetom, posebne skupine nezaposlenih, pripadnici romske nacionalne manjine te poslodavci u teškoćama s ciljem očuvanja radnih mjesta (HZZ, 2016b).

U konačnici se može ocijeniti da su mjere dobro usmjerene, a problemi vezani uz njihovo kratko trajanje i relativno nisku konzistentnost. Različiti programi su započeli i omogućili rezultate koji su bolji od očekivanih, ali je, nažalost, zbog nedostatka financijskih mogućnosti prekinuta njihova provedba. U fokusu mjera aktivne politike zapošljavanja u 2013. i 2014. godini bile su mlade osobe do 29 godina života, osobito nakon 1. srpnja kada je Hrvatska postala punopravna članica EU te je započela provedbu aktivnosti u sklopu Garancije za mlade (engl. *Youth Guarantee*).

Mjera za poticanje zapošljavanja - Stručno osposobljavanje za rad bez zasnivanja radnog odnosa – na početku je bila vrlo kritizirana mjera, ali s daljnjim trajanjem krize na nju su počeli pozitivno gledati i mladi ljudi koji su njezini glavni korisnici. Naime, cilj mjera je osiguranje stjecanja radnog iskustva mladim osobama u zvanju za koje su se školovale (sa završenim preddiplomskim, diplomskim sveučilišnim ili stručnim studijem, sa završenim srednjoškolskim obrazovanjem u obrtničkim zanimanjima ili sa završenim srednjoškolskim obrazovanjem u četverogodišnjem trajanju zvanja). Mjeru mogu koristiti sve osobe koje su prijavljene u evidenciju nezaposlenih najmanje 30 dana i koje nemaju više od 12 mjeseci evidentiranog staža u zvanju za koje se obrazovali, a mjera može trajati do 36 mjeseci.

Spomenuta mjera novčano nije stimulatívna jer novčana pomoć određena Odlukom Vlade Republike Hrvatske iznosi svega 2.400,00 kn, ali je od početka 2015. godine to ipak bitno povećanje u odnosu prema prijašnjem iznosu od 1.600,00 kn, koliko je iznosila otkad se počela primjenjivati 2013. godine. Tako novčana pomoć određena Odlukom Vlade Republike Hrvatske o visini novčane pomoći za nezaposlenu osobu koju je Zavod uključio u stručno osposobljavanje iznosi 2.400 kn, te se može sufinancirati trošak prijevoza u visini stvarnih troškova prijevoza sredstvima javnog prijevoza, a u maksimalnom iznosu od 1.000,00 kuna (HZZ, 2017).

Dosadašnja iskustva mladih, posebno visokoobrazovnih osoba, su različita, od onih izrazito povoljnih do onih vrlo negativnih. Ipak se pokazalo da su mladi u sadašnjim uvjetima na tržištu rada prisiljeni prihvatiti i ovakvu situaciju. Povoljno je to što poslodavac mora imati osiguranog mentora za osobu na stručnom osposobljavanju koji ima odgovarajuće zanimanje, razinu

obrazovanja ili radno iskustvo na poslovima koje će obavljati polaznik stručnog osposobljavanja te razrađen program stručnog osposobljavanja. HZZ kontrolira provodi li se spomenuto. Najnovije istraživanje koje je uključilo 13.000 gospodarstvenika pokazuje da je tijekom 2014. i 2015. gotovo 80 % poslodavaca najpozitivnijim ocijenili upravo ovu mjeru, i to ponajviše veliki poslodavci, poslodavci iz informacijskih i komunikacijskih djelatnosti te iz djelatnosti obrazovanja. Podaci o osobama koje su bile uključene u stručno osposobljavanje za rad bez zasnivanja radnog odnosa govore da je njih 62 % bilo u zaposlenosti godinu dana nakon izlaska iz intervencije (Vlada RH, 2016). Oni koji se odmah ne zaposle stječu konkretno iskustvo u praksi za koju su se školovali te time postaju konkurentniji u odnosu prema drugima u daljnjem procesu traženja stalnog zaposlenja. Naime, mladi ljudi su svjesni da sve češće zapadaju u „začarani krug“ u kojem bez radnog iskustva nema radnog mjesta, a opet je nemoguće dobiti to radno iskustvo te sve više pozitivno gledaju na spomenutu mjeru.

5. ZAKLJUČNA RAZMATRANJA

Provedena analiza pokazuje kako je proces tranzicije iz sustava obrazovanja na tržište rada vrlo kompleksan proces te serazlikuje među pojedinim članicama EU. U Hrvatskoj je mali broj mladih osoba koje istovremeno sudjeluju u sustavu obrazovanja i na tržištu rada te je i to razlog zašto mladi kada prvi puta traže zaposlenje najčešće nemaju potrebne kompetencije. Spomenuto se odnosi i na srednja i visokoobrazovna zanimanja. Naime, poslodavci ističu da je glavni problem što ih nisu stekli praksom tijekom obrazovanja.

U nekim zemljama zapadne Europe (Austrija, Njemačka, Švicarska, dio Italije) srednjoškolci većinom pohađaju strukovno obrazovanje, pri čemu je visoko zastupljen praktični rad u odgovarajućim poduzećima koj kasnije trebaju te buduće mlade ljude. Riječ je o posebnom obliku izobrazbe uz rad tzv. Nauka na djelu (njem. *Duale Ausbildung*). Gotovo dvije trećine mladih u Njemačkoj uključuje se u program nauke nakon završenog školovanja. Poduzeća, kao što je elektronički i inženjerski div Siemens, svake godine primaju oko 10 000 naučnika, a Mercedes Benz oko 2 000 – što je otprilike trećina godišnjeg ukupnog broja naučnika u njemačkoj automobilskoj industriji. Jedan od pet njemačkih naučnika je žena. Devet od deset mladih naučnika dobit će stalno zaposlenje. Drugima se mogu ponuditi kratkoročni ugovori (Europska komisija, 2013, str. 10).

U nas se, nažalost, potrebe tržišta rada ne usklađuju sa školskim programima, a većina poduzeća još uvijek nije zainteresirana za organiziranje takvog vida prakse. Upravo takav vid obrazovanja uključit će mlade na tržište rada još za vrijeme srednjeg strukovnog školovanja i visokog obrazovanja. Zato je nužno ojačati obrazovni sustav u suradnji s poduzetnicima te ojačati cjeloživotno i profesionalno usmjeravanje. U skladu s time trebalo bi omogućiti i priznavanje neformalno stečenih znanja i vještina. U kontekstu usklađivanja

politika na tržištu rada i hrvatske obrazovne politike bilo bi vrlo zanimljivo promotriti zapošljavanje studenata koji završavaju pojedine sveučilišne i stručne studije u Hrvatskoj, no za takvo prikladno praćenje nije dostatno analizirati samo podatke HZZ-a za zapošljavanje, već bi bilo nužno analizirati i aluminijske pojedinih fakulteta.

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**YOUTH UNEMPLOYMENT AND HARMONIZATION
OF THE EDUCATION SYSTEM TO THE LABOUR
MARKET NEEDS*****Abstract***

Croatia has been facing high youth unemployment (unemployment rate around 43% in 2015) and the growing share of discouraged youth for years. Youth unemployment in the EU, especially in Croatia, brings concern because it is almost three times higher than the overall unemployment rate and far higher than the EU, which is approximately 20%. The paper analyses inactivity of young people through the so-called NEET group, whose share is alarming in Bulgaria, Cyprus, Greece, Croatia and Spain. Most of these young people does not have a lower secondary school degree and leaves the educational system and training early. The transition from school to the labour market is not easy, and the average transition period until the first significant work in the EU takes about 6.5 months. Given the simultaneous participation of youth in the process of education and the labour market, five groups of countries differ. The mismatch of the labour market and the education system is particularly evident in Croatia, and the rise of unemployed young people with the highest level of education causes a growing concern.

Keywords: labour market, youth unemployment, NEET group, education system

JEL classification: J13, J24, J64

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PERCIPIRANI UČINCI KRUZING TURIZMA KOD STANOVNIKA DUBROVNIKA

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Sažetak

Kruzing turizam može, uz pozitivne, rezultirati dugoročnim negativnim učincima po okoliš i život lokalnog stanovništva. U radu se analizira kako stanovnici Dubrovnika percipiraju razvoj i učinke kruzing turizma. Anketnom primjenom Skale utjecaja turizma (TIS) na uzorku od 122 stanovnika ljeta 2015. godine ispitano je postojanje povezanosti između pojedinih aspekata/percipiranih učinaka kruzing turizma i izabranih obilježja stanovnika: dobi, obrazovanja, radnog iskustva, broja članova obitelji, dužine življenja u Dubrovniku, udaljenosti stana/kuće od područja koja posjećuju turisti s kruczera te neposrednih iskustva s kruzing turizmom, kao i rodne razlike u latentnim dimenzijama kruzing turizma. Utvrđene su dobre osnovne metrijske karakteristike (pouzdanost i konstruktna valjanost) TIS-a. Nisu utvrđene statistički značajne rodne razlike u percipiranim aspektima kruzing turizma. Postoji manji broj

statistički značajnih povezanosti između aspekata/percipiranih učinaka kruzing turizma s odabranim socio-demografskim i drugim varijablama istraživanja. U žena su te povezanosti mahom niske i vrlo niske. U radu se ističu implikacije percepcija i stavova lokalnog stanovništva na razvoj turizma i važnost njihovog daljnjeg istraživanja.

Ključne riječi: turizam, kruzing turizam, percepcija stanovništva, Dubrovnik.

UVOD

Nautički turizam, a osobito turizam pomorskih krstarenja kao njegov sastavni dio, posljednjih je godina relativno često istraživana tema u turističkim zemljama koje bilježe, odnosno koje planiraju značajan porast ovog oblika turizma, koji se naziva i kruzing turizmom (engl. *cruising tourism*). Međutim, istraživanja kruzing turizma u Hrvatskoj i na teritoriju Dubrovnika još uvijek su malobrojna, pa ovaj članak nastoji istražiti upravo problematiku utjecaja kruzing turizma na dubrovačkom području, sa stanovišta domaćeg stanovništva.

Kruzing turizam ostvaruje najbrži rast u usporedbi s drugim oblicima turizma (Brida et al, 2012). U razdoblju od 2004. do 2014. godine svjetska potražnja za kružnim putovanjima narasla je s 13,1 milijuna na 22,0 milijuna putnika što iznosi +68 %, dok je u Europi narasla s 2,80 na 6,39 milijuna putnika, što je porast od +129 % (CLIA, 2015). Rezultati dinamičnog rasta kruzing turizma na Sredozemlju, koji ostvaruje iznadprosječne rezultate, itekako se osjećaju na hrvatskom dijelu Jadrana, a posebno u Dubrovniku i Korčuli (Ban i dr., 2014). Dosadašnji je rast krstarenja u Dubrovniku oscilirao, ali je u prosjeku bio izrazito dinamičan. Prosječna godišnja stopa rasta u desetogodišnjem razdoblju 2003. – 2013. godine bila je visokih 11,5 % (Ban i dr., 2014, prema statističkim podacima Lučke uprave Dubrovnik, 2014).

Turizam je u Dubrovačko-neretvanskoj županiji po prihodima, zaposlenosti i izvanoj orijentiranosti u samom vrhu regionalnoga gospodarstva, a kruzing turizam njegov je bitan segment, s tim da na Dubrovnik otpada više od 70 % kruzing turizma na razini Hrvatske i više od 90 % na razini Dubrovačko-neretvanske županije, proizvedeći značajne izravne i neizravne ekonomske utjecaje na sam grad i ukupni regionalni turizam. Prosječni udio turista s kruzera u dnevnim migracijama tijekom ljeta iznosi 11,8 %, a u vremenu njihove maksimalne prisutnosti, obično oko 13 sati, njihov udio je 54,7 %. (Đukić & Jerković, 2008). S godišnjim pristajanjem oko 700 brodova i preko 1.000.000 putnika, uz ograničene prostorne, prometne, urbane, tehničke i organizacijske kapacitete, te izrazitu sezonalnost (šest mjeseci: svibanj – listopad, četiri dana u tjednu: srijeda, petak, subota i nedjelja, pet sati u danu: kasno prijepodne – rano poslijepodne), granice održivosti ovog oblika turizma i mogućnosti daljnjeg razvoja na destinaciji kao što je Dubrovnik postaju ozbiljno pitanje (Ban i dr., 2014). Povećanje broja mega brodova (za više od 2.000 putnika), velika koncentracija kruzera u luci, neodgovarajuća organizacija i ograničene

mogućnosti primjerenog prijema velikog broja turista s kruzera posljednjih su godina doveli do pitanja prevladavaju li pozitivni ili negativni učinci kruzining turizma na ostale oblike turizma, gospodarstvo u cjelini, okoliš i život lokalnog stanovništva (Peručić i Puh, 2012; Pavlič, 2013).

Dubrovnik treba upravljati kruzining turizmom na način koji će osigurati održavanje i unapređivanje kvalitete života u lokalnoj zajednici. Uz objektivne, potrebno je voditi računa o subjektivnim učincima kruzining turizma, zbog čega se i provode istraživanja stavova i percepcija stanovnika, kojih je za područje Dubrovnika bilo razmjerno malo, premda te spoznaje mogu značajno pridonijeti održivom razvoju kako kruzining turizma, tako i turističke destinacije u cjelini.

Zbog toga je osnovna svrha ovog rada bila analizirati kako stanovnici Dubrovnika percipiraju razvoj i učinke kruzining turizma. Prvi cilj ovog rada bio je utvrditi osnovne metrijske karakteristike (pouzdanost i konstruktnu valjanost) korištene Skale utjecaja turizma (TIS), koja se odnosi na percepcije više aspekata kruzining turizma. Drugi cilj rada bio je provjeriti postojanje povezanosti između pojedinih aspekata/percipiranih učinaka kruzining turizma i odabranih socio-demografskih i drugih obilježja stanovnika: dobi, stupnja obrazovanja, dužine radnog iskustva, broja članova obitelji, dužine življenja u Dubrovniku, udaljenosti stana/kuće od pojedinih gradskih područja na kojima se koncentriraju turisti s kruzera, te njihovih neposrednih iskustva s kruzining turizmom i turistima s kruzera. Konačno, utvrdit će se i rodne razlike u latentnim dimenzijama kruzining turizma.

Pretpostavljeno je da će latentne dimenzije upitnika pokazivati relativnu podudarnost s izvornim skalama upitnika TIS. Također, pretpostavljeno je da ne postoji povezanost između ispitanih aspekata/percipiranih učinaka kruzining turizma sa spomenutim socio-demografskim i drugim varijablama istraživanja. Konačno, pretpostavili smo nepostojanje rodni razlika u percipiranim učincima kruzining turizma.

PREGLED LITERATURE

Različiti autori različito kategoriziraju pozitivne i negativne učinke turizma. Najčešće se navode tri temeljne kategorije: ekonomski utjecaji, utjecaji na okoliš te društveni i kulturni utjecaji (Murphy, 1983; Gunn 1988; Gursoy, Chi & Dyer, 2009), koji su međusobno povezani, tako da se promjena u jednoj komponenti odražava u svima (Zaei & Zaei, 2013). Uz pozitivne, stanovništvo turističke destinacije trpi i negativne ekonomske učinke: posljedice neravnomjernog razvoja, sezonalnog zapošljavanja, rasta cijena proizvoda i usluga, poskupljenja i prodaje nekretnina itd., što utječe na način života i migracijska kretanja. Prilagodba autentičnih običaja i tradicijskih vrijednosti potrebama turizma, čime se narušava identitet i autentičnost destinacije, ima društvene i kulturne, ali dugoročno može imati i neželjene ekonomske posljedice. Nepoželjni utjecaji turizma na okoliš (onečišćenje voda, zraka, problemi

zbrinjavanja otpada, degradacija prostora, oštećenja povijesnih i arheoloških lokaliteta, prenapučenost i ostali ekološki problemi), osim negativnih ekonomskih posljedica, mogu bitno umanjiti kvalitetu života lokalnog stanovništva i održivi razvoj lokalne zajednice (Blažević, 2007).

Stavovi i reakcije stanovništva na razvoj turizma mijenjaju se kroz vrijeme, o čemu postoje različiti teorijski pristupi. Doxey's Irridex model opisuje četiri glavne faze razvoja turizma: euforija (inicijalni razvoj), apatija (turizam se razvija i postaje dio života), nelagodnost (turizam otežava svakodnevni život i uzrokuje probleme) te mogući antagonizam (odnos prema turizmu prerasta u konflikt i širi se anti-turističko ponašanje) (Doxey, 1975, prema Benić, 2011). Teorija životnog ciklusa turističke destinacije (Butler, 1980) analizira turističke aktivnosti kroz sukcesivne faze: istraživanje, uključivanje, razvoj, konsolidacija, stagnacija i pad, koji u nekim slučajevima može prijeći u fazu pomlađivanja. S tim su povezani i stavovi lokalnog stanovništva koji se kreću od početnih pozitivnih do negativnijih, kako raste zabrinutost zbog štetnih dugoročnih efekata turizma po okoliš, socijalnu zajednicu i drugo.

U pogledu kruzingskog turizma, zbroje li se svi pozitivni učinci i nepovoljne posljedice (mjerljive i nemjerljive, trenutačne i dugoročne), ocjenjuje se da je rezultat što ga donosi kruzingski turizam pozitivan, ali je potrebno unaprijed računati na posljedice s negativnim predznakom, kontrolirati sve procese i njima sustavno upravljati prihvatljivim tehničko-tehnološkim-procesnim rješenjima, koja doduše imaju svoju cijenu i potrebno je dobro ih poznavati, htjeti i znati primjenjivati. Međutim, kruzingski turizam se dosad u Dubrovniku uglavnom događao, a takav je pristup razvoju turizma neodrživ (Ban i sur., 2014).

Najzapaženiji problem u Dubrovniku je velik broj turista s kruzera koji se nađu na malom prostoru, stvarajući uska grla i dugotrajne zastoje na ulasku i izlasku iz gradske jezgre, što postaje velik problem za stanovnike Dubrovnika (Horak i dr., 2007; Marušić i dr., 2008; Peručić & Puh, 2012) i predstavlja negativan publicitet za dubrovački turizam.

Vrlo zapažen problem su i negativni utjecaji kruzingskog turizma na okoliš. Negativni učinci, a pogotovo rizici od ekoloških posljedica su kompleksni jer se ne sastoje samo od zbroja rizika od štetnih utjecaja različitih supstanci nego i od niza sinergijskih učinaka čije se dimenzije, ukupan učinak i težina njegovih posljedica ne mogu unaprijed predvidjeti u cijelosti (Leburic i sur., 2006). Pojedine analize troškova koji se odnose na okoliš i lokalnih ekonomskih benefita upućuju da su za lokalnu zajednicu u Republici Hrvatskoj troškovi i do sedam puta veći od financijskih koristi (Carić, 2010; Carić & Mackelworth, 2014).

Geneza koncepta zaštite životne sredine proširena na tzv. održivi razvoj smatra se nužnim okvirom za upravljanje destinacijskom ponudom, a ciljevi održivog razvoja turizma su: zadovoljiti potrebe i unaprijediti kvalitetu života lokalnog stanovništva, očuvati socio-kulturni identitet lokalnih zajednica, razviti visoko kvalitetan turistički proizvod, unaprijediti kvalitetu doživljaja turista, te čuvati resurse kako bi ih i budući naraštaji mogli koristiti (Jackson, 2013, citirano

prema Ljubičić, 2016). Smatra se da se povijesnom jezgrom grada, premda je ista resurs iznimne vrijednosti, do danas nije adekvatno upravljalo, što se argumentira sve češćim prigovorima građana i kulturne elite (Ljubičić, 2016), kao i upozorenjima UNESCO-a. U svojoj nedavnoj studiji UNESCO zahtijeva da se maksimalni broj turista s kruzera odredi na temelju analize održivog kapaciteta gradske jezgre i sigurnosnih zahtjeva, ali da ne bi smio prelaziti broj od 8.000 turista dnevno, tražeći da se po potrebi to pitanje i normativno uredi (UNESCO-ICOMOS, 2015). Briga i o ostalim gospodarskim, društvenim i prirodnim resursima imperativ je održivog razvoja ove destinacije koja treba zadržati orijentaciju na kvalitetu umjesto kvantitete (Đurković, 2007).

Objektivni i subjektivni negativni učinci kruzning turizma nepovoljno se odražavaju na brojne ekonomske i društvene aspekte, tako da se i u Dubrovniku očituje tzv. paradoks kruzning turizma, jer usprkos njegovim gospodarskim učincima koji su nesporni (Ban i dr., 2014) lokalno stanovništvo iskazuje zabrinutost zbog rasta broja kruzera (Šerić & Režić, 2014).

Zadovoljstvo stanovnika i različitih kategorija turista iznimno je važna varijabla za održivi razvoj turizma. Korištenjem *fuzzy* modela linearnog programiranja, uzimajući u obzir koeficijent zadovoljstva obje skupine aktera (onih koji izravno ostvaruju prihode od turizma i stoga teže što većoj iskorištenosti resursa i drugih: gostiju u hotelskim i ostalim smještajnim objektima, putnika s kruzera, izletnika i lokalnog stanovništva) koje imaju suprotstavljena očekivanja i čije je zadovoljstvo obrnuto proporcionalno te povezano s nizom ograničenja, tj. s nižim stupnjem iskorištenosti resursa jer to utječe na kvalitetu boravka u destinaciji, pojedini autori izračunavaju vrijednosti održivog kapaciteta/optimalnog korištenja smještajnih, prometnih i povijesno-kulturnih resursa grada Dubrovnika (Ban i dr., 2014). Tako se došlo do ograničenja iskorištenosti hotelskih kapaciteta od 89,8 %, iskorištenosti kapaciteta ostalih smještajnih objekata od 84,7 %, te mogućnosti prihvata 42,8 % maksimalnog broja turista s kruzera, a da se pri tome ne naruši kvaliteta boravka u razdoblju najvećeg turističkog opterećenja destinacije (u glavnoj turističkoj sezoni). Međutim, zaključuje se da se ravnomjernijom distribucijom potražnje tijekom godine/tjedna/dana i odgovarajućim upravljanjem kretanjem posjetitelja i vozila u destinaciji može prihvatiti i veći broj turista s kruzera, a da se ne naruši održivost i atraktivnost destinacije, na zadovoljstvo lokalnog stanovništva i svih turista u Dubrovniku (Ban i dr., 2014). U svakom slučaju, u Dubrovniku je nužno implementirati odgovarajući način upravljanja kruzning turizmom, kako bi se osigurao razvoj i stacionarnog i kruzning turizma, zajedno s kvalitetom života u lokalnoj zajednici.

Premda interes za upravljanje složenim odnosima i međutjecajima u turističkim destinacijama raste, znanja potrebna da se lokalna zajednica uključi u proces razvoja turizma smatraju se nedostatnima (Presenza, Del Chiappa i Sheehan, 2013).

Smatra se da se relativno kasno počelo s istraživanjima percepcija, mišljenja i stavova lokalnog stanovništva o razvoju krusing turizma i njegovim eksternalijama i da je takvih istraživanja nedostatno (Diedrich, 2010; Gatewood & Cameron, 2009; Brida et al, 2012). Donedavno su se više istraživali gospodarski i ekološki učinci krusing turizma i utjecaji na okoliš, a rjeđe društveni utjecaji na turističke destinacije (Peručić i Puh, 2012). Posljednjih godina s osvještavanjem negativnih učinaka raste broj istraživanja o štetnim utjecajima na okoliš (Carić, 2010; Brida & Zapata, 2010) te o negativnim utjecajima na stacionarni turizam, imidž destinacije i kvalitetu života stanovnika (Pavlič, 2013). Istraživanja stavova stanovništva i turista o krusing turizmu i njegovim učincima mogu značajno pridonijeti boljem upravljanju, kako krusing turizmom, tako i razvojem destinacije u cjelini.

METODOLOGIJA ISTRAŽIVANJA

Sudionici istraživanja izabrani su metodom namjernog uzorka stanovnika Dubrovnika, obuhvativši ukupno 122 odraslih osoba (dob >18) od čega 47 muškaraca i 75 žena, među kojima 52 osobe srednjeg ili višeg obrazovanja te 70 visoko obrazovanih osoba, ukupnog dobnog raspona 20-76 godina, radnog iskustva u rasponu 0-46 godina, a većina sudionika oba spola živi u kućanstvima s 3-4 člana domaćinstva.

Upitnici su distribuirani putem elektronske pošte tijekom ljeta 2015. godine (u jeku turističke sezone), s ostvarenim odazivom od 83 % ispunjenih upitnika. Sudionicima je garantirana anonimnost i istaknuta je znanstvena svrha istraživanja. Također, sudionicima je istaknuta mogućnost postavljanja pitanja vezano uz različite nejasnoće u vezi pojedinih pitanja, što najčešće nije bilo potrebno.

Kao metoda prikupljanja podataka, za potrebe istraživanja prilagođena je i prevedena na hrvatski jezik verzija *Tourism Impact Scale* (Skala utjecaja turizma, u daljem tekstu TIS), prvotno korištena za mjerenje utjecaja turizma na okoliš te ekonomskih, društvenih i kulturnih utjecaja (Gursoy & Rutherford, 2004; Dyer et al., 2007), koja je prilagođena za primjenu upravo u području krusing turizma (Brida et al, 2012).

Cjelokupni anketni upitnik se sastojao od dva dijela. Prvi dio sadržavao je socio-demografske varijable: spol, dob, stupanj obrazovanja, godine radnog iskustva, broj članova obitelji, godine boravka u Dubrovniku; udaljenost mjesta stanovanja od luke Gruž, kao i od Starog grada i drugih najposjećenijih turističkih područja; jesu li članovi njihove obitelji zaposleni/povezani s krusing turizmom, imaju li stanari i članovi njihovih obitelji kontakte s turistima s kruzera u svojem svakodnevnom životu, te jesu li sami sudionici ranije sudjelovali u kružnim putovanjima.

Drugi dio upitnika se sastojao od 25 tvrdnji (TIS) o percepcijama rezidenata o socio-ekonomskim, društvenim i kulturnim, ekološkim utjecajima kruzing turizma te o gužvama prouzročnim učincima („crowding-out“ učincima).

Odgovori su davani na petostupanjskoj ljestvici Likertova tipa (od 1 = uopće se ne slažem do 5 = u potpunosti se slažem). Da bi se provjerila jasnoća upitnika i njegov prijevod na hrvatski jezik, u smislu razumljivosti, pilot-test je proveden s malom skupinom stanovnika, u kojem se pokazalo da su čestice u vrlo visokoj mjeri razumljive sudionicima.

Statističke analize

Sve statističke analize provedene su statističkim paketom IBM SPSS 24.0. Kao mjera interne konzistencije (pouzdanosti) upitnika Skala utjecaja turizma (TIS) korišten je Cronbachov alfa koeficijent. Faktorskom analizom (metoda glavnih komponenti, Varimax rotacija, s prethodno provedenim Bartlettovim i Kaiser-Meyer-Olkinovim testom) utvrđene su latentne dimenzije koje reprezentiraju prostor definiran česticama upitnika. Deskriptivna statistika primijenjena je na ukupne rezultate u latentnim dimenzijama TIS-a, koji su izračunani metodom regresijskih faktorskih bodova. Za utvrđivanje rodni razlika u percipiranim utjecajima kruzing turizma, korištena je kanonička diskriminacijska analiza. Spermanovim koeficijentom korelacije provjerena je međusobna povezanost između pojedinih aspekata (dimenzija ili skala) kruzing turizma i ostalih socio-demografskih i drugih varijabli obuhvaćenih ovim istraživanjem. Sve razlike komentirane su na razini rizika pogreške u procjeni $p < 0,05$.

REZULTATI ISTRAŽIVANJA

Struktura sudionika istraživanja s obzirom na osnovna socio-demografska obilježja: spol, dob, godine radnog iskustva i stručnu spremu prikazana je u tablici 1.

Tablica 1.

Sociodemografska obilježja ispitanika u uzorku

Obilježja ispitanika		Muškarci	Žene
Spol	f	47	75
Dob (godine)	M	46,45	43,67
	SD	10,89	13,08
	raspon	20-70	21-76
Obrazovanje	srednja, viša/bacc.	25	27
	visoka, mr., dr.	22	48
Radno iskustvo (godine)	M	20,49	17,19
	SD	11,54	11,55
	raspon	0-44	0-46

Kao preduvjet za operacionalizaciju **ciljeva** istraživanja, provjerene su glavne metrijske karakteristike (pouzdanost i konstruktna valjanost) upitnika Skala utjecaja turizma (TIS), koji prethodno nije korišten na hrvatskoj populaciji. Proveden je postupak analize glavnih komponenti s Varimax rotacijom (5 iteracija), nakon što je prethodno utvrđeno da je uzorak pogodan za faktorizaciju Bartlettovim testom sfericiteta ($\chi^2=2636,11$; $df=300$; $p<,000$) i Kaiser-Meyer-Olkinovom mjerom ($,904$). Broj faktora određen je prema Guttman-Kaiserovu kriteriju te u odnosu prema interpretabilnosti faktora. Nakon provedene analize (tablica 2), dobivena su četiri faktora koji objašnjavaju ukupno 71,3 % ukupne varijance. Nakon rotacije, prvi faktor objašnjava najviše, 33,4 % ukupne varijance, drugi 14,6 %, treći 12,6 % i četvrti 10,7 % ukupne varijance. Na temelju varijabli kojima su saturirane glavne komponente, prvi faktor (12 čestica) nazvan je Infrastruktura, javne usluge, standard, društveni i kulturni život, drugi (4 čestice) Djelovanje na okoliš, treći (3 čestice) Investicije i zapošljavanje, te četvrti (3 čestice) Kriminal, prometne nesreće i troškovi. Isključene su dvije čestice izvornog upitnika, jedna koja se odnosi na socio-ekonomski aspekt (Utječu na svakodnevni život / *Influence daily life*) te na crowding-out učinke (Koristi od kruzinger aktivnosti odlaze vanjskim poduzetnicima / *The benefits from cruise activity end to external entrepreneurs*). Sve dobivene latentne dimenzije pokazale su i zadovoljavajuću pouzdanost, koja varira od srednje visoke do visoke (tablica 2).

Tablica 2.
Faktorska struktura i pouzdanost upitnika Skale utjecaja turizma (TIS) u ovom istraživanju

Varijable (utjecaji kruzera i kruzinger turizma)	Faktori			
	1	2	3	4
3. Društveni i kulturni utjecaji [Pridonose poboljšanju sigurnosnog standarda u destinaciji]	,835			
3. Društveni i kulturni utjecaji [Pridonose poboljšanju društvenog i kulturnog života u lokalnoj zajednici]	,828			
3. Društveni i kulturni utjecaji [Poticu valorizaciju lokalne tradicije i autentičnosti]	,828			
3. Društveni i kulturni utjecaji [Povećavaju broj kulturnih i sportskih događaja]	,808			
1. Socio-ekonomski utjecaji [Utječu na povećanje kvalitete života]	,799			
3. Društveni i kulturni utjecaji [Pridonose povećanju kvalitete lokalnog turizma i komercijalne infrastrukture]	,782			
1. Socio-ekonomski utjecaji [Utječu na poboljšanje zaštite i valorizacije povijesne baštine]	,766			
1. Socio-ekonomski utjecaji [Utječu na poboljšanje javnih usluga]	,718		,354	
1. Socio-ekonomski utjecaji [Poticu povećanje životnog standarda]	,639		,442	
1. Socio-ekonomski utjecaji [Utječu na poboljšanje infrastrukture (ceste, komunikacije, vodovod, itd)]	,634		,548	
3. Društveni i kulturni utjecaji [Povećavaju poznatost kulturnih i drugih informacija u lokalnoj zajednici]	,630		,398	

1. Socio-ekonomski utjecaji [Povećavaju naše raspoložive prihode]	,614		,515	
1. Socio-ekonomski utjecaji [Utječu na bolju prodaju kuća u gradu i okolnim selima]	,609		,308	
4. Utjecaji na okoliš [Poboljšavaju zaštitu okoliša]	,596	-,410		
2. "Crowding-out" učinci [Imaju negativne učinke na ostale relevantne projekte]	,560			,491
4. Utjecaji na okoliš [Dovode do povećanog onečišćenja okoliša i mora]		,932		
4. Utjecaji na okoliš [Dovode do pogoršanje stanja u ekosistemu (štete na tlu, flori i fauni)]		,879		
4. Utjecaji na okoliš [Povećavaju količinu otpada]		,879		
4. Utjecaji na okoliš [Povećaju zagušenja u javnim i rekreacijskim zonama]		,854		
1. Socio-ekonomski utjecaji [Povećavaju mogućnosti zapošljavanja]	,437		,714	
1. Socio-ekonomski utjecaji [Utječu na povećanje javnih investicija i investicija u infrastrukturu]	,383		,706	
1. Socio-ekonomski utjecaji [Utječu na povećanje privatnih investicija i investicija u infrastrukturu]	,391		,685	
2. "Crowding-out" učinci [Dovode do povećanja prometnih nesreća]				,827
2. "Crowding-out" učinci [Dovode do povećanja kriminala u Gradu]				,752
2. "Crowding-out" učinci [Dovode do povećanja troškova života u Gradu]				,744
Karakteristični korijeni	8,35	3,65	3,15	2,66
Postotak objašnjene varijance	33,4	14,6	12,6	10,7
Pouzdanost (Cronbachov alfa)	0,934	0,789	0,810	0,751

Legenda: Faktori: 1 - Infrastruktura, javne usluge, standard, društveni i kulturni život, 2 - Djelovanje na okoliš, 3 - Investicije i zapošljavanje, 4 - Kriminal, prometne nesreće i povećani troškovi.

Deskriptivna obilježja latentnih dimenzija TIS-a pokazuju različitost percepcija pojedinih aspekata kruzina turizma kod muškaraca i žena. Kod muškaraca, od svih korelacija (ukupno 44) između aspekata (latentnih dimenzija) kruzina turizma i ostalih varijabli, statistički značajno je samo šest povezanosti. Pozitivna i srednje visoka statistički značajna povezanost pronađena je između aspekta „Infrastruktura, javne usluge, standard, društveni i kulturni život“ i udaljenosti mjesta stanovanja od drugih područja koje posjećuju turisti s kruzera, kao i aspekta „Investicije i zapošljavanje“ i zaposlenosti članova obitelji u relaciji s kruzina turizmom. Najviše (premda niske) negativne povezanosti pronađene su između aspekta „Infrastruktura, javne usluge, standard, društveni i kulturni život“ i zaposlenosti članova obitelji u relaciji s kruzina turizmom, kao i između aspekta „Kriminal, prometne nesreće i povećani troškovi“ i broja članova obitelji (tablica 3).

Tablica 3.

Povezanosti između pojedinih aspekata kruzing turizma te socio-demografskih i drugih varijabli (muškarci)

Muškarci	Infrastruktura, javne usluge, standard, društveni i kulturni život	Djelovanje na okoliš	Investicije i zapošljavanje	Kriminal, prometne nesreće i povećani troškovi
Dob (godine)	,233	-,013	-,107	,188
Obrazovanje	-,120	,064	,205	-,244
Radni staž	,198	-,045	-,060	,254
Broj članova obitelji	-,129	-,214	,092	-,312*
Koliko dugo živite u Dubrovniku?	,324*	-,021	-,087	,133
Koliko su Vaš stan / kuća udaljeni od... [Luke Gruž]	-,025	-,180	-,020	-,035
Koliko su Vaš stan / kuća udaljeni od... [Starog Grada (jezgra)]	,351*	-,009	,100	,050
Koliko su Vaš stan / kuća udaljeni od... [... drugih područja koje posjećuju turisti s kruzera?]	,533**	,043	-,156	-,020
Neposredna iskustva s kruzing turizmom [Jesu li članovi Vaše obitelji povezani / zaposleni s kruzing turizmom?]	-,376**	,036	,448**	-,249
Neposredna iskustva s kruzerima [Imate li kontakta s turistima u svakodnevnom životu?]	-,264	,026	,001	,019
Neposredna iskustva s kruzerima [Jeste li sami koristili usluge kruzing turizma?]	-,058	,065	-,083	,044

Legenda: **korelacija značajna uz $p < 0,01$; *korelacija značajna uz $p < 0,05$

Kod žena, od svih korelacija (ukupno 44) između aspekata (latentnih dimenzija) kruzing turizma i ostalih varijabli, statistički značajno je samo pet povezanosti. Sve dobivene povezanosti su niske. Najviša pozitivna statistički značajna povezanost pronađena je između aspekta „Infrastruktura, javne usluge, standard, društveni i kulturni život“ i vlastitih neposrednih iskustava s kruzerima. Najviša negativna statistički značajna povezanost pronađena je između aspekta „Djelovanje na okoliš“ i duljine radnog staža (tablica 4).

Tablica 4.

Povezanosti između pojedinih aspekata kruzing turizma te socio-demografskih i drugih varijabli (žene)

Žene	Infrastruktura, javne usluge, standard, društveni i kulturni život	Djelovanje na okoliš	Investicije i zapošljavanje	Kriminal, prometne nesreće i povećani troškovi
Dob (godine)	-,043	-,155	-,052	,130
Obrazovanje	-,152	-,019	,133	,157
Radni staž	-,061	-,267*	,037	,187
Broj članova obitelji	,093	-,226	-,099	-,119
Koliko dugo živite u Dubrovniku?	-,002	-,115	-,022	,075
Koliko su Vaš stan / kuća udaljeni od... [Luke Gruž]	,083	,063	-,130	,037
Koliko su Vaš stan / kuća udaljeni od... [Starog Grada (jezgra)]	,228*	,139	,133	-,197
Koliko su Vaš stan / kuća udaljeni od... [... drugih područja koje posjećuju turisti s kruzera?]	,172	,264*	,167	-,169
Neposredna iskustva s kruzing turizmom [Jesu li članovi Vaše obitelji povezani / zaposleni s kruzing turizmom?]	,094	-,254*	,026	-,157
Neposredna iskustva s kruzerima [Imate li kontakta s turistima u svakodnevnom životu?]	,064	-,047	-,171	,019
Neposredna iskustva s kruzerima [Jeste li sami koristili usluge kruzing turizma?]	,270*	-,038	,191	,010

Legenda: *korelacija statistički značajna uz $p < 0,05$; **korelacija statistički značajna uz $p < 0,01$

Među deskriptivnim obilježjima, kod muškaraca su najviše pozitivne vrijednosti pronađene za skalu Investicije i zapošljavanje, a kod žena za skalu Djelovanje na okoliš. Kod muškaraca su najviše negativne vrijednosti pronađene za Djelovanje na okoliš, a kod žena za Investicije i zapošljavanje. Vrijednost Wilksove λ (0,942) pokazuje da diskriminacijska funkcija nije statistički značajna te ne razlikuje statistički značajno dvije grupe sudionika po varijablama pojedinih aspekata kruzing turizma (tablica 5). Drugim riječima, centriodi za muškarce (0,311) i žene (-0,195) su smješteni relativno blizu. Također, rezultati univarijatne analize varijance u odnosu prema diskriminacijskoj funkciji pokazuju nepostojanje statistički značajnih rodnih razlika u aspektima kruzing turizma.

Tablica 5.

Rodne razlike u latentnim dimenzijama kruzing turizma (kanonička diskriminacijska analiza)

Latentne dimenzije	Muškarci		Žene		Wilks Lambda	F (df= 1, 120)	Matrica strukture
	Arit. sred.	Std. dev.	Arit. sred.	Std. dev.			
Infrastruktura, javne usluge, standard, društveni i kulturni život	0,076	1,152	-0,048	0,897	,996	,439	,244
Djelovanje na okoliš	-0,212	1,131	0,133	0,891	,972	3,509	-,688
Investicije i zapošljavanje	0,199	1,099	-0,125	0,919	,975	3,092	,646
Kriminal, prometne nesreće i povećani troškovi	-0,038	1,053	0,024	0,972	,999	,112	-,123
Karakteristični korijen	0,062	Kanonička korelacija		0,241	Hi-kvadrat (df=4)		7,065

ANALIZA REZULTATA ISTRAŽIVANJA

Istraživanjem su utvrđene dobre metrijske karakteristike upitnika TIS (konstruktna valjanost i pouzdanost), kao i odgovarajuća interpretabilnost faktora/glavnih komponenti koje su nazvane: 1. Infrastruktura, javne usluge, standard, društveni i kulturni život, 2. Djelovanje na okoliš, 3. Investicije i zapošljavanje, te 4. Kriminal, prometne nesreće i troškovi. Time su na logički strukturiran način obuhvaćene najvažnije kategorije utjecaja kruzing turizma koje se ističu u literaturi, pa se može zaključiti da je upitnik TIS subskalama koje obuhvaća i metrijskim zahtjevima kojima udovoljava upotrebljiv i preporučljiv za buduća istraživanja u ovom području.

Buduće praćenje percepcija i stavova stanovništva, ali i različitih kategorija turista, smatra se nužnim, iz više razloga. Koncept uključivanja interesnih skupina, među kojima stanovništva, u planiranje turističkog razvoja preporučuje se zbog toga što se pokazalo, ako interesne skupine podržavaju turistički razvoj, da su sklonije podržati investicije i projekte javnog i privatnog sektora, spremnije su tolerirati pojedine negativne učinke turizma te, što je također vrlo važno, pozitivnim stavom i gostoljubivošću značajno pridonose zadovoljstvu turista. Pozitivni se stavovi stanovnika smatraju ključnima za održivost i dugoročni uspjeh turizma u pojedinoj destinaciji, a obrnuto vrijedi za negativne stavove (Fridgen, 1991; Andriotis & Vaughan, 2003). Periodičnim praćenjem percepcija i stavova stanovništva pravodobno se identificiraju mogući problemi i konflikti koji mogu štetiti imidžu i razvoju destinacije (Tomljenović i sur., 2013).

Niz novijih stranih i pojedina domaća istraživanja pokazala su da su stanovnici koji ostvaruju izravne koristi od turizma skloniji primjećivati njegove

pozitivne učinke. Tako su u nedavnom istraživanju za područje Italije, Mesina, ispitanici zaposleni u turizmu pokazali nešto pozitivnije stavove prema krusing turizmu (Brida et al., 2012). Već su nalazi spomenutog istraživanja na uzorku stanovnika Dubrovnika i okolnih područja (Peručić i Puh, 2012) pokazali da ljudi koji su zaposleni u turizmu rjeđe od ostalih smatraju da krusing turizam ima negativan utjecaj na kvalitetu života lokalnog stanovništva (46 % naprema 56 %), te rjeđe ističu da bi daljnje povećanje broja krusera dodatno zaprijetilo kvaliteti života (31 % naprema 42 %). Ispitivanjem percepcija i stavova o važnosti i utjecaju turizma u stanovnika sedam hrvatskih priobalnih županija (Tomljenović i sur., 2013) utvrđene su statistički značajne razlike između stanovnika koji ostvaruju i onih koji ne ostvaruju korist od turizma. Stanovnici koji ostvaruju korist od turizma značajno su češće smatrali da turizam „svima omogućuje bolji život“ da je zbog turizma „mjesto postalo bolje za život“ te su značajno rjeđe isticali da je u sezoni „previše jahti i brodica na Jadranu“. Međutim, pokazalo se da i u pojedinim inozemnim istraživanjima, posebno u destinacijama s dugom turističkom tradicijom, sklonost pozitivnog stava prema turizmu postoji kod lokalnog stanovništva neovisno o osobnoj koristi, pošto postoji spoznaja o kolektivnom interesu (Tomljenović i sur., 2013).

Neka druga istraživanja potvrdila su da neposredna iskustva s korištenjem kruserskih usluga imaju utjecaj na stavove o krusing turizmu (Brida et al, 2012). Npr., ispitanici koji su već bili na kružnom putovanju, pozitivnije su percipirali utjecaje krusing turizma na lokalnu zajednicu, premda su ujedno bili svjesniji njegovog negativnog utjecaja na okoliš (Brida et al., 2012).

I u ovom su se istraživanju pojedina neposredna iskustva s krusing turizmom pokazala povezanim s pozitivnijim percepcijama i stavovima o učincima krusing turizma u Dubrovniku. To se, očekivano, ne odnosi na neposredno iskustvo kontakta s turistima u svakodnevnom životu, ali se pokazuje u odnosu prema osobnom iskustvu korištenja usluge krusing turizma. Osobno iskustvo je u ženskoj populaciji povezano s pozitivnijim percepcijama na skali (dimenziji) Infrastruktura, javne usluge, standard, društveni i kulturni život.

Posebno je zanimljiv nalaz da su neposredna iskustva s krusing turizmom koja su obuhvaćena pitanjem: „Jesu li članovi Vaše obitelji zaposleni / povezani s krusing turizmom?“, kod muškaraca u nižoj, ali negativnoj korelaciji s percepcijama na skali „Infrastruktura, javne usluge, standard, društveni i kulturni život“. Ovaj nalaz je u suprotnosti s nalazima prethodnih istraživanja. Oprezno bi se moglo dati tumačenje po kojem upravo osobe koje su bolje upoznate s problematikom krusing turizma, istovremeno u većoj mjeri uočavaju i iskazuju njegove negativne infrastrukturne, društvene, kulturne i druge učinke. U žena su odgovori na pitanje: „Jesu li članovi Vaše obitelji zaposleni / povezani s kruserskim turizmom?“, u niskoj negativnoj korelaciji s percepcijama na skali „Djelovanje na okoliš“, što znači da izvor prihoda iz krusing turizma vjerojatno donekle utječe na malo manje negativnu percepciju ekoloških utjecaja.

„Udaljenost kuće/stana od Luke Gruž“ nije povezana s percepcijama utjecaja kruzing turizma ni kod muškaraca ni kod žena ni na jednoj od skala upitnika TIS. Međutim, „udaljenost od Starog Grada (gradske jezgre)“ statistički je značajno i pozitivno povezana s percepcijom utjecaja kruzing turizma na skali „Infrastruktura, javne usluge, standard, društveni i kulturni život“, i kod muškaraca i kod žena, s tim da se pretežno radi o niskim, a kod žena o vrlo niskim povezanostima. Kod muškaraca je i udaljenost stana/kuće od drugih područja koja posjećuju turisti s kruzera u srednje visokoj pozitivnoj povezanosti s percepcijama na skali „Infrastruktura, javne usluge, standard, društveni i kulturni život“. Sve to je u skladu s nalazima prethodnih istraživanja (Peručić & Puh, 2012), gdje je stav da kruzing turizam ima negativan utjecaj na kvalitetu života lokalnog stanovništva bio češći u stanovnika koji žive u Starom Gradu, nego u stanovnika iz drugih dijelova Dubrovnika i okolnih mjesta. Radi se o očekivanom nalazu, u skladu s fenomenom da se udaljeniji izvori nelagode (i ekološki rizici) lakše prihvaćaju od bližih, što je poznato kao „Nimby“ sindrom (*Not in my backyard!* - Ne u mom dvorištu!) (Leburić i sur., 2006). Ovaj je nalaz ipak indikativan, jer govori da su najnegativnije percepcije ustanovljene upravo u stanovnika koji žive bliže centru grada i koji gradsku jezgru "održavaju živom", što bi se u interesu održivog turističkog razvoja grada Dubrovnika trebalo promijeniti. Činjenica da su u žena s većom udaljenošću stana kuće/od drugih područja koja posjećuju kruzerski turisti, dobivene i negativnije percepcije na skali „Djelovanje na okoliš“, može pokazivati njihovo sagledavanje širih negativnih utjecaja na prirodne resurse od onih vezanih za samu gradsku jezgru.

Nepostojanje povezanosti dobi i obrazovanja ni s jednim od percipiranih aspekata kruzing turizma je u skladu s rezultatima pojedinih prethodnih istraživanja (Peručić & Puh, 2012). Niska statistički značajna negativna povezanost nađena je u žena između dužine radnog staža i odgovora na skali „Djelovanja na okoliš“, pa se može reći da žene s manje godina radnog staža nešto negativnije percipiraju ekološke utjecaje kruzing turizma. Kod muškaraca je nađena statistički značajna povezanost između dužine življenja u Dubrovniku i pozitivnijih percepcija utjecaja kruzing turizma na skali „Infrastruktura, javne usluge, standard, društveni i kulturni život“. Statistički značajna negativna povezanost nađena je u muškaraca između broja članova obitelji i odgovora na skali „Kriminal, prometne nesreće i povećani troškovi“, što znači da su muškarci s manje članova obitelji nešto skloniji negativnijem percipiranju spomenutih utjecaja kruzing turizma.

Premda deskriptivna obilježja latentnih dimenzija (skala) TIS-a pokazuju različite tendencije važnosti pojedinih dimenzija u muškaraca i žena, statistički značajne rodne razlike u aspektima kruzing turizma zapravo ne postoje (što pokazuju rezultati kanoničke diskriminacijske analize). Uvidom u deskriptivna obilježja latentnih dimenzija upitnika TIS na uzorku stanovnika Dubrovnika u ovom istraživanju, tako i u usporedbi sa stanovnicima drugih hrvatskih gradova uključenih u kruzing turizam, može se doći do korisnih podataka o „životnom ciklusu“ kruzerske destinacije, odnosno o „stupnju iritacije“ lokalnog

stanovništva, u skladu s već spomenutom Doxeyjevom teorijom indeksa iritacije domaćeg stanovništva (Doxey, 1975., prema Benić, 2011.), kao i Butlerovom teorijom životnog ciklusa turističke destinacije (Butler, 1980.) prema kojoj stavovi stanovništva koreliraju s fazama razvoja: istraživanje, uključivanje, razvoj, konsolidacija, stagnacija i pad (eventualno pomlađivanje). Činjenica je da empirijska istraživanja stavova stanovnika redovito pokazuju negativan učinak protoka vremena i da su u destinacijama u inicijalnoj fazi turizma stavovi generalno pozitivniji, u usporedbi s onima u fazi razvoja (Tomljenović i sur., 2013). Ova činjenica samo govori u prilog da praćenja ove vrste treba redovito provoditi kako bi se negativni utjecaji (objektivni i subjektivni) kruzing turizma na vrijeme uočavali i po mogućnosti otklanjali. S tim u vezi valja napomenuti da su pojedina ranija istraživanja (Horak i sur., 2007; Marušić i sur., 2008; Peručić i Puh, 2012) pokazivala dominantno pozitivni opći stav o kruzing turizmu i njegovim ekonomskim učincima. Međutim, i u tim su istraživanjima stavovi o negativnom utjecaju kruzing turizma na okoliš bili dosta zastupljeni (čak i stavovi o negativnom utjecaju kruzing turizma na kvalitetu života). Premda rezultate ovog istraživanja nije moguće izravno usporediti s nalazima prethodno spomenutih istraživanja (zbog različitog instrumentarija i drugih metodoloških nepodudarnosti), nameće se pretpostavka da s vremenom dolazi do sve negativnijih stavova dubrovačkog stanovništva, koji se kod muškaraca i žena očigledno odnose na različite aspekte, što ćemo detaljno razmotriti kasnije.

Glavna prednost istraživanja je prilagođavanje po prvi put kod nas primijenjenog mjernog instrumenta TIS karakteristikama hrvatske populacije, te određivanje pripadnih mjernih karakteristika. Dobivene latentne dimenzije upitnika TIS potencijalno bolje tumače specifične percepcije hrvatskih (dubrovačkih) stanovnika, u odnosu prema njegovim izvornim dimenzijama. Također, dan je orijentacijski uvid u rodne razlike u percepcijama učinaka kruzing turizma u stanovnika Dubrovnika.

Nedostatak ovog istraživanja je prigodni i razmjerno mali uzorak sudionika, koji nije u dostatnoj mjeri reprezentativan za cjelokupnu populaciju stanovnika Dubrovnika. Međutim, uzimajući ta metodološka ograničenja u obzir, rezultate možemo smatrati indikativnima.

U budućim istraživanjima ovaj, po prvi put u nas primijenjeni instrument (TIS upitnik), trebalo bi primijeniti na većem i reprezentativnijem uzorku sudionika (slučajnom ili stratificiranom). Također bi bilo korisno prikupiti podatke o više socio-demografskih obilježja stanovnika, koji mogu biti relevantni za ovaj predmet istraživanja.

Korišteni upitnik, s obzirom na odgovarajuća obilježja pouzdanosti i sadržaj uključenih skala, može se upotrijebiti za usporedna (transverzalna) i sukcesivna (longitudinalna) istraživanja ovoga važnog fenomena. U budućim bi se istraživanjima njime moglo koristiti, ne samo u Dubrovniku, nego i na ostalim kruzerskim destinacijama, uključujući, ne samo stanovništvo, već i različite kategorije turista.

Istraživanje stavova građana ocjenjuje se iznimno važnim jer će daljnji razvoj kruzing turizma ovisiti isključivo o dinamici rješavanja postojećih pitanja (Peručić & Puh, 2012). Mjerenje njegovih utjecaja postaje važno pitanje u smislu prikladnog planiranja kruzing turizma na području Dubrovnika (Marušić i sur., 2008), kao i za strategiju razvoja kruzing turizma i općenito turizma u Republici Hrvatskoj. Nalazi ovog i sličnih istraživanja mogu pridonijeti akademskoj rapravi o održivom turizmu, ali i poslužiti u praktične svrhe, u otklanjanju uočenih problema i planiranju održivog razvoja kruzing turizma za konkretnu destinaciju i njezine odgovarajuće prezentacije.

ZAKLJUČCI

Utvrđene su dobre osnovne metrijske karakteristike (pouzdanost i konstruktna valjanost) Skale utjecaja turizma (TIS), koja se odnosi na percepcije više aspekata kruzing turizma. Premda latentne dimenzije upitnika pokazuju relativnu podudarnost s izvornim skalama upitnika TIS, mi smo njihove dimenzije preimenovali u za ovo istraživanje prikladnije nazivlje. Deskriptivna obilježja latentnih dimenzija TIS-a, pokazuju različite tendencije važnosti pojedinih dimenzija u muškaraca i žena. Međutim, provjera rodni razlika u latentnim dimenzijama percipiranih aspekata kruzing turizma nije pokazala statistički značajne rodne razlike. Postoji manji broj statistički značajnih povezanosti (svega šest kod muškaraca i samo pet kod žena) između aspekata/percipiranih učinaka kruzing turizma i odabranih socio-demografskih i drugih varijabli istraživanja koje se odnose na udaljenosti kuće/stana od područja na koja zalaze kruzerski turisti i neposredna iskustva s kruzing turizmom, turistima i uslugama. U žena su te povezanosti mahom niske i vrlo niske. Nalazi istraživanja mogu poslužiti u praktične svrhe, u otklanjanju uočenih problema i planiranju održivog razvoja kruzing turizma za konkretnu destinaciju i njezine odgovarajuće prezentacije.

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PERCEIVED EFFECTS OF THE CRUISING TOURISM AMONG RESIDENTS OF DUBROVNIK

Abstract

In addition to its positive effects, cruising tourism can also have longterm negative impacts on the environment and life of local population. This paper analyzes how the development of cruising tourism in Dubrovnik and some of its effects are perceived by its residents. Using the questionnaire Tourism Impact Scale (TIS) on the sample of 122 residents during the summer of 2015, the correlation between the particular aspects/perceived effects of cruising tourism and some characteristics of the residents was examined (age, education level, work experience, family members' number, length of stay in Dubrovnik, the distance of the flat/house from the areas visited by the tourists from cruisers and direct experience with crusing tourism), as well as gender differences in latent dimensions of cruising tourism. Good metric characteristics (reliability and construct validity) of Tourism Impact Scale (TIS) were obtained, showing the relative compatibility with the original scales in the questionnaire TIS. There were no statistically significant gender differences in the perceived aspects of the cruiser tourism. There was a small number of statistically significant correlations between certain aspects/perceived effects of the cruising tourism with some socio-demographic and other variables in the research. For female participants, these correlations are mainly low and very low. The paper highlights the implications of perceptions and attitudes of local inhabitants on the development of tourism and emphasizes the importance of further research.

Keywords: *tourism, cruising tourism, residents' perceptions, Dubrovnik*

JEL classification: *L83, Z31*

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POVEZANOST KLIMATSKIH PROMJENA I TURIZMA: MULTIKRITERIJSKA ANALIZA OCJENJIVANJA MJERA PRILAGODBE¹

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Sažetak

U posljednjim se desetljećima globalna klima znatno promijenila što je utjecalo na ljudsko društvo i prirodu. Ugrožavanje ravnoteže globalnoga ekološkog sustava i pojava intenzivnijih klimatskih promjena, koje dijelom uzrokuju i ljudske djelatnosti, važniji su izazovi čovječanstva. Klimatske promjene, kao globalni fenomen, utjecat će na mijenjanje uvjeta poslovanja u cjelokupnoj ekonomiji, pa tako i u turizmu. Zbog prevladavanja tog problema, osim mjera koje se odnose na ublažavanje klimatskih promjena, odnosno na smanjivanje negativnog utjecaja turizma na klimu, potrebno je poduzeti i mjere prilagodbe kako bi se turizam prilagodio novim klimatskim uvjetima. Rad istražuje načine na koje se hrvatski turizam može prilagoditi i mjere za koje ključni dionici smatraju da su najpodesnije za korištenje. U cilju definiranja mjera prilagodbe korištena

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je metoda intervjuja ključnih dionika u turizmu, a u cilju rangiranja mjera korištena je multikriterijska analiza.

Ključne riječi: turizam, klimatske promjene, mjere prilagodbe, multikriterijska analiza.

1. UVOD

Klimatske promjene predstavljaju jedinstveni izazov cjelokupnoj ljudskoj civilizaciji i utječu na sve aspekte ljudskog života. Tematiku povezanosti klimatskih promjena i turizma veoma je važno izučavati zbog utjecaja turizma na gospodarstvo Republike Hrvatske. Svi sektori društva, pa tako i turizam, u budućnosti će se morati prilagoditi novim uvjetima na koje će djelovati klimatske promjene. U turizmu se mogu poduzeti mnogobrojne mjere putem kojih se može postići prilagodba. U radu je dan skup mjera prilagodbe koji je ocijenjen multikriterijskom analizom. Cilj rada je naznačiti važnost osmišljavanja mjera prilagodbe u turizmu te utvrditi koje su mjere najpogodnije i najefikasnije za primjenu s ciljem što bržeg ostvarenja procesa prilagodbe i umanjivanja mogućih negativnih učinaka.

2. PREGLED LITERATURE

Interes za klimatske promjene povećao se posljednjih godina, a posebice nakon održavanja Konferencije o klimatskim promjenama u Kopenhagenu u organizaciji Ujedinjenih Naroda u prosincu 2009. godine (Scott, Becken, 2010). Nakon održavanja ove Konferencije, održale su se i mnoge druge, no važno je za spomenuti Pariški sporazum koji je usvojen 2015. godine, a ratificiran 2016. godine. Tom Sporazumu je cilj smanjivanje emisije stakleničkih plinova kako bi se porast globalne temperature ograničio na znatno manje od 2°C, povećala sposobnost prilagodbe na štetne utjecaje klimatskih promjena i osigurao protok financijskih sredstava prema niskim emisijama stakleničkih plinova i razvoja koji ne utječe na klimatske promjene (UNFCC, 2015). U posljednjim se desetljećima globalna klima znatno promijenila što je utjecalo na ljudsko društvo i prirodu. Ugrožavanje ravnoteže globalnog ekološkog sustava i sve intenzivnijih klimatskih promjena jedne su od najvećih izazova čovječanstva. Očekuje se da će klimatske promjene dovesti do većih temperatura, smanjenja količina oborina, smanjenja vlažnosti zraka, povećanja sunčevog zračenja što će uzrokovati brojne posljedice (Müller; Weber, 2008, Branković et al., 2017). Klimatske promjene su globalni izazov koji zahtijeva dugoročne mjere prilagodbe u cilju izbjegavanja okolišnih, socijalnih i ekonomskih posljedica (Dwyer et al., 2012). Turizam je izuzetno osjetljiv na klimatske promjene jer ovisi o povoljnoj klimi, očuvanom okolišu i bogatstvu flore i faune (Buckley, 2011, Müller; Weber, 2008). Klimatski elementi poput temperature, sunčanih sati i kišnih dana velikim dijelom određuju međunarodne turističke tijekove u Europi (Amelung; Viner, 2006, Joopetal.,

2015). Vrijeme i klima mogu biti poticaj, ali i čimbenik koji negativno djeluje na turistička kretanja te se može reći da postoji jaka povezanost između turističkih kretanja i klimatskih prilika (Hamilton et al., 2005). Osjetljivost turizma ovisit će o razini izloženosti te o mogućnosti prilagodbe destinacije (Schliephack; Dickinson, 2017). Turizam svojim djelovanjem (transportom, smještajem i ostalim aktivnostima) pridonosi emisiji stakleničkih plinova, a organizacije poput UNWTO-a i UNEP-a procijenile su da ukupan doprinos globalnog turizma emisiji stakleničkih plinova 2005. godine iznosi 5 % od ukupnih emisija CO₂ (Scott;Becken, 2010). Očekuje se da će u budućnosti emisije biti još i veće zbog mnoštva razloga, poput povećanja broja turista, putovanja u daleke krajeve i sl. (Gössling et al., 2013). Klimatske promjene imaju negativan utjecaj na turizam, ali i turizam pridonosi klimatskim promjenama (Han et al., 2016). Prilagodba klimatskim promjenama utjecat će na promjene u svim razinama – lokalne, nacionalne i globalne razine. Zajednice na svim razinama moraju provoditi mjere prilagodbe, uključujući korištenje novih tehnologija i pripremanje za buduće klimatske stresove (Climate Change: Impacts, Vulnerabilities and Adaptation in Developing Countries, 2007). Ocjenjivanjem mjera prilagodbe klimatskim promjenama putem multikriterijske analize bavi se više autora. Tako neki od njih daju prikaz korištenja ovog načina ocjenjivanja u pitanjima koji se bave okolišnom problematikom (Huangetal., 2011, Koschkeetal., 2012), dok se određeni autori bave upravo ocjenjivanjem mjera prilagodbe u sektoru turizma (Linkovetal., 2006, Bruinet al., 2009).

3. UTJECAJ KLIMATSKIH PROMJENA NA HRVATSKI TURIZAM I NJIHOVE OČEKIVANE PROMJENE

U Hrvatskoj je klima od iznimne važnosti za turizam zbog strukture turističke ponude, odnosno radi toga što se većina turističkih tijekova odvija u ljetnim mjesecima kada se očekuju i najveće promjene (Šverko Grdić; Krstinić Nižić, 2016). Posebno su značajna ljeta koja se odlikuju blagim vrućinama s vrlo malo kiše na obali, mnogo sunca te rijetkim ekstremnim vremenskim uvjetima (Dobra klima za promjene, 2008). Najtoplija su područja obalnog prostora Republike Hrvatske na kojima se događa i najveći dio turističkih aktivnosti, odnosno područje Dalmacije i Sjevernog Jadrana, s najmanjim temperaturnim razlikama po godišnjim dobima. Najhladnije je planinsko područje, na kojem se ne bilježi veliki dio turističkih aktivnosti, s najvećim razlikama zimi i ljeti. Panonski prostor i Grad Zagreb imaju hladnije jeseni i zime u odnosu prema prostorima uz more. Najhladniji mjesec je siječanj s prosječnim temperaturama od -2 °C u gorskim područjima te do 5 °C u primorju. Najtopliji je srpanj s prosječnim temperaturama od 15 u gorskoj do 24 °C u primorskoj Hrvatskoj (Dobra klima za promjene, 2008). Prema istraživanju mišljenja turista idealna maksimalna dnevna temperatura za turistička kretanja bila bi blizu 30 °C (Maddison, 2001), dok bi idealna prosječna dnevna temperatura trebala biti oko

21°C (Amelung; Viner, 2006). Na temelju ovih podataka vidi se da je već sada temperatura obalnog prostora Republike Hrvatske veća nego idealna temperatura. Većina turističkih aktivnosti odvija se na otvorenom i turisti mogu računati na veliki broj sunčanih dana i povoljne klimatološke prilike tijekom godišnjeg odmora. Privlačna odredišta u unutrašnjosti su također povezana s aktivnostima na otvorenom, uključujući i značajan udio turizma u nacionalnim parkovima i parkovima prirode. Sve spomenute značajke, koje čine turistička odredišta privlačnima, ranjive su na klimatske promjene (Pattersonetal., 2006).

Državni hidrometeorološki zavod Republike Hrvatske napravio je projekciju klimatskih promjena za razdoblje do 2040. godine u kojem je putem različitih modela predvidio sljedeće promjene (Šesto nacionalno izvješće Republike Hrvatske prema Okvirnoj konvenciji Ujedinjenih naroda o promjeni klime, 2013):

- Zima: temperatura će porasti između 1,1 i 1,2 °C. Očekuje se smanjenje sunčevog zračenja, najmanje na južnim otocima, a najveće u sjevernoj Hrvatskoj. Porast vlažnosti zraka. Srednja brzina vjetra neće se mijenjati. Manji porast količina oborine.
- Proljeće: temperatura će bit veća za 0,7 °C na otocima Dalmacije te malo više od 1 °C u sjeverozapadnoj Hrvatskoj. Očekuje se smanjenje sunčevog zračenja najviše na Jadranu i gorskoj Hrvatskoj. Porast vlažnosti zraka. Srednja brzina vjetra neće se mijenjati. Manji porast količina oborine.
- Ljeto: temperatura će porasti između 1,1 i 1,2 °C. Očekuje se porast količine sunčevog zračenja. Porast vlažnosti zraka najveća u odnosu prema ostalim godišnjim dobima, posebice na Jadranu. Porast srednje brzine vjetra posebice na Jadranu. Smanjenje količina oborine.
- Jesen: porast temperature između 0,9 °C u istočnoj Slavoniji, oko 1,2 °C na Jadranu, a u zapadnoj Istri i do 1,4 °C. Očekuje se porast količine sunčevog zračenja. Porast vlažnosti zraka. Porast srednje brzine vjetra osobito je izražene na sjevernom Jadranu što predstavlja promjenu od oko 20-25 % u odnosu prema referentnom razdoblju. Smanjenje količina oborine.

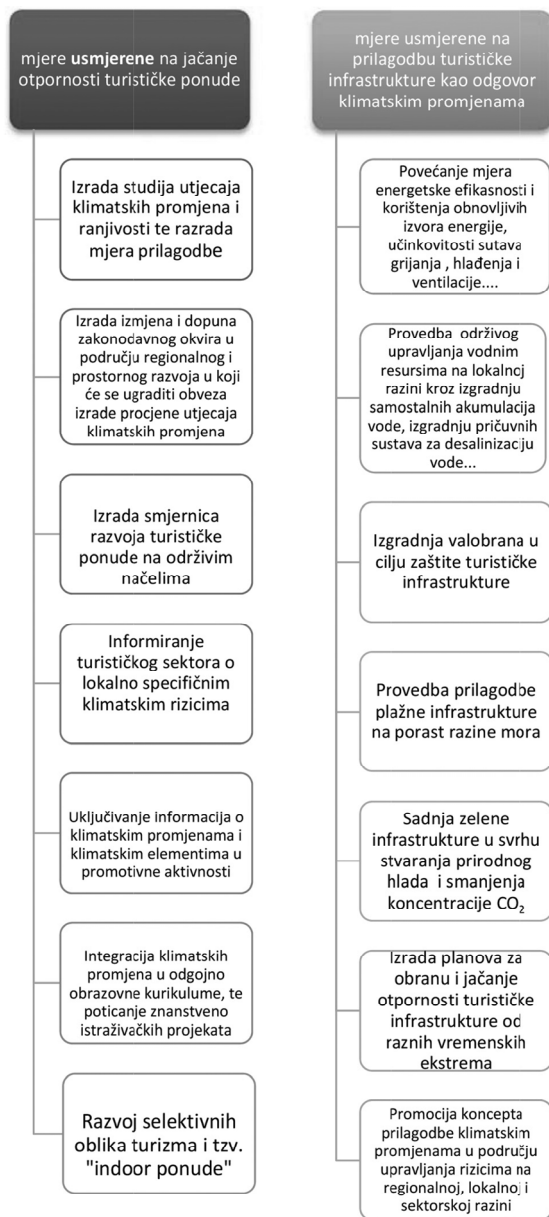
Ove promjene dovest će do promjene i nekih drugih klimatskih elemenata. Tako će npr. povećanje temperature uzrokovati povećanje temperature mora, kao i podizanje njegove razine. Spomenute promjene je potrebno uzeti u obzir kada se planira razvoj hrvatskog turizma u budućnosti, kako bi se umanjili negativni efekti, a istaknuli pozitivni efekti koje će klimatske promjene donijeti.

4. MJERE PRILAGODBE KLIMATSKIM PROMJENAMA

Staklenički plinovi ostaju određeni niz godina u atmosferi nakon što se emitiraju. Kad bi emisije u ovom trenutku prestale, još bi uvijek dolazilo do zagrijavanja zbog životnog vijeka stakleničkih plinova. Zemlja je u ovom trenutku toplija za 0,7 °C u odnosu prema 1900. godini, a ako npr. prestane emisija stakleničkih plinova, Zemlja će se u idućem desetljeću zagrijati za daljnjih 0,5-1 °C (Stern, 2006). S obzirom da većina međunarodnih sporazuma koji su nastali kako bi se jasno ograničila emisija stakleničkih plinova, dosad nisu bili uspješni, treba prihvatiti činjenicu da je daljnje zagrijavanje neizbježno te je potrebno napraviti pripreme za nove izazove. Zbog toga je potrebno poduzimati mjere prilagodbe kako bi se turizam pripremio za nove uvjete poslovanja i izbjegao moguće negativne učinke klimatskih promjena, a iskoristio one pozitivne koje će se u budućnosti dogodati.

Jedna od definicija prilagodbe klimatskim promjenama može glasiti: prilagodba prirodnog ili ljudskog sistema na sadašnje ili očekivane klimatske promjene, motivirana je ekonomskim, socijalnim ili okolišnim činiteljima (Climate Change and Tourism: Responding to Global Challenges, 2008). No osim ove, postoje i brojne druge definicije pa je tako jedna dana u *Stern Review* i ona glasi: „prilagodba će biti značajna u smanjivanju ranjivosti na klimatske promjene i ona je jedini način rješavanja problema negativnih utjecaja klimatskih promjena u sljedećih nekoliko desetljeća“ (Stern, 2006). Koncept „kapacitet prilagodbe“ upućuje na „potencijalnu mogućnost sistema, regije ili zajednice za prilagodbu efektima ili utjecajima klimatskih promjena“ (Bruin i drugi, 2009). Interes za prilagodbu klimatskim promjenama postoji posebice u krugovima znanstvenika i političara te se istraživanje i pregovaranje o njima intenziviralo u zadnje vrijeme. Prilagodba novim klimatskim uvjetima u budućnosti bi mogla biti vrlo skupa, a njezin cilj je smanjiti osjetljivost i negativne efekte klimatskih promjena (Jakob, etal., 2015).

Mnoge zemlje usvojile su nacionalne strategije prilagodbe, pa je tako i Republika Hrvatska trenutno u izradi studije Strategija prilagodbe klimatskim promjenama (www.prilagoba-klimi.hr). Okviri za izradu sličnih strategija su: dokument napravljen od strane UNDP-a pod nazivom „Adaptation Policy Frameworks for Climate Change“, (UNDP, 2004) i različiti nacionalni programi koji osiguravaju smjernice za razvijanje takvih strategija (Bruinetal., 2009). U cilju prilagodbe klimatskim promjenama turizma Republike Hrvatske razvijene su mjere koje se mogu podijeliti u dvije grupe (sl. 1.).



Slika 1. Mjere prilagodbe turizma klimatskim promjenama u Republici Hrvatskoj

Izvor: obrada autorica

Istaknute mjere prilagodbe mogle bi se primijeniti u hrvatskom turizmu u cilju ublažavanja negativnih učinaka te promoviranja pozitivnih učinaka koje će klimatske promjene donijeti. Jednako tako implementacija ovih mjera važna je, ne samo zbog klimatskih promjena, već i zbog zadržavanja i osiguranja konkurentnosti hrvatskog turizma u budućnosti. Naime, turizam je aktivnost koja zahtijeva uzastopne promjene i prilagođavanje novim potrebama i željama suvremenog turista.

5. METODOLOGIJA I REZULTATI

5.1. Metodologija istraživanja

Za ocjenjivanje mjera prilagodbe postoji mnogo metoda koje se mogu koristiti, no multikriterijska analiza rješava problem odabira različitih mogućnosti na strukturalni način (Koschke, et al., 2012, Huang, et al., 2011). Ovom metodom se najčešće koristi i kod određivanja kriterija odabira mjera prilagodbe (Linkov, et al., 2006), a korištenje više kriterija za ocjenjivanje mjera daje bolje rezultate odabira određenih mogućnosti. U tom slučaju ova metoda se može koristiti za: definiranje prioriteta u Nacionalnim akcijskim planovima; procjenu instrumenata za ublažavanje klimatskih promjena; procjenjivanje mjera kojima se postiže prilagodba; procjenjivanje inženjerskih opcija koje služe kao odgovor na klimatske promjene. Može se koristiti za identifikaciju opcije ili skupa opcija, rangiranje opcija, određivanje prihvatljivih, ali i neprihvatljivih mjera. Može se koristiti u cilju ocjenjivanja mjera prije nego što se one usvoje, ali i kao pomoć pri procjenjivanju neprihvatljivih mogućnosti. Multikriterijska analiza prilikom procjene koristi i kvantitativne i kvalitativne podatke dobivene različitim načinima, npr. ispitivanjem eksperata, na temelju čega se može dobiti okvir putem kojeg je moguće rješavati inicijalni problem. Ovom metodom se sve više koriste vlade u cilju procjenjivanja projekta i politika koji imaju kompleksan socio-ekonomski i okolišni utjecaj koji je najčešće teško za mjeriti u novčanim jedinicama (A practical framework for planning pro-development climate policy, 2011). Kvalitetu i pouzdanost ove metode pokazuje i činjenica da je organizacija *United Nations Environment Programme* (UNEP) postavila inicijativu pod nazivom „MCA4climate“ koja osigurava praktičnu pomoć vladama zemalja u razvoju u pripremi njihovih planova i strategija prilagodbe i ublažavanja klimatskih promjena. Metodologija se temelji na primjeni multikriterijske analize koja osigurava procjenu ekonomskih, socijalnih i okolišnih učinaka različitih politika.

Multikriterijska analiza najčešće se koristi u turizmu pri procjenjivanju i odabiru razvoja određenog oblika turizma destinacije, ali i pri procjenjivanju drugih važnih odluka koje se odnose na turističko planiranje, upravljanje i poduzimanje mjera prilagodbe i ublažavanja klimatskih promjena (Michailidou et al., 2016).

Pristup izradi multikriterijske analize temelji se na rješavanju nekoliko koraka i to (Munda, 1995): određivanje vrijednosti i ciljeva uključenih dionika; određivanje kriterija ocjenjivanja u multikriterijskoj analizi; ocjenjivanje različitih mogućnosti. Konkretno, prvi korak se odnosi na istraživanje i razumijevanje ključnih dokumenata koji se odnose na konkretnu problematiku. Na taj način se dolazi do identifikacije ključnih dionika. U konkretnom primjeru ključni dionici se mogu podijeliti u nekoliko grupa (tab 1).

Tablica 1.

Popis intervjuiranih ključnih dionika

Vrsta dionika	Broj dionika	Naziv dionika
Državna tijela	2	Dionici nadležni za istraživanu tematiku
Civilno društvo	4	Udruge koje se bave ekološkim pitanjima, a djeluju na području koje je važno za turističke tijekove, i udruga koja okuplja poslodavce u turizmu Republike Hrvatske
Znanstveni sektor	4	Dionici koja se bave predmetnom tematikom

Izvor: obrada autorica

Budući da u Republici Hrvatskoj nema puno stručnjaka iz sektora turizma koji se bave klimatskim promjenama, proveden je intervju sa deset dionika čiji su odgovori analizirani multikriterijskom analizom. Intervju je proveden u veljači 2017. godine uz prethodno dogovoren termin. Prilikom istraživanja ove problematike korištena je metoda intervjua s ključnim dionicima u sektoru turizma, koji se bave utjecajem klimatskih promjena i mjerama prilagodbe. Intervju je uključivao pitanja koja su se odnosila na rangiranje važnosti poduzimanja mjera prilagodbe istaknutih u slici 1. prema sljedećim kriterijima (Bruinet al., 2009.).

- kriterij važnosti opcije prilagodbe u smislu očekivanih koristi,
- kriterij financiranja: vlastita sredstva te sredstva EU,
- razdoblje implementacije, odnosno hitnost poduzimanja određenih mjera i to: 3 godine ili 5-7 godina,
- ostali razmatrani kriteriji i to:
 - provedbeni (brza i jednostavna provedba i usklađenost s potrebnim zakonodavnim okvirom),
 - klimatski (smanjenje ranjivosti na klimatske promjene i smanjenje razine onečišćenja u okolišu),

- ekonomski (hitnost provedbe kako bi se smanjili ekonomski gubitci, poboljšanje ekonomske učinkovitosti i dodatni pozitivni ekonomski učinci),
- ekološki (očuvanje bioraznolikosti i zaštita prirodnih i kulturnih resursa),
- socijalni (smanjenje društvene/socijalne nejednakosti i poboljšanje uvjeta života),
- politički i institucionalni kriteriji (poboljšanje upravljanja i doprinos političkoj stabilnosti).

Svakom od kriterija dodijeljene su ocjene uz pomoć kojih su ih dionici ocjenjivali, a raspon ocjena se kretao od 1 do 5, gdje 1 predstavlja najlošiju, a 5 najbolju ocjenu (Dodgsonetal., 2000, Greening;Bernow, 2004). Time je proveden i drugi korak multikriterijske analize, odnosno određeni su kriteriji ocjenjivanja. Osim pitanja zatvorenog tipa (skala Likertovog tipa) dionici su odgovarali i na pitanja otvorenog tipa koja su se vrednovala uz pomoć gore spomenutih kriterija. Svrha ovog intervjua bila je ispitati glavne dionike u turizmu o prioritetnim mjerama prilagodbe u turizmu za koje smatraju da bi na najbolji način pridonijele ublažavanju negativnih učinaka klimatskih promjena. Na kraju je napravljen treći korak multikriterijske analize u kojem su se ocijenili dobiveni odgovori putem osnovnog pristupa, koji se odnosi na izračun linearnog ponderiranog zbroja svih mogućnosti po različitim kriterijima. Formula za određivanje vrijednosti je (Huankgetal., 2011):

$$V = \sum_i w_i x_i$$

Gdje je: $\sum_i w_i = 1$

Dobiveni rezultati prikazani su u sljedećem odjeljku.

5.2. Rezultati istraživanja

Dionici su ocjenjivali i rangirali 14 mjera prikazanih na slici 1, koje predstavljaju mjere prilagodbe na klimatske promjene u sektoru turizma. Predstavljene mjere su sveobuhvatne pa bi se mogle podijeliti na još niz manjih, konkretnijih mjera. U skladu s prikazanim kriterijima u prethodnoj točki, iskazane rezultate dobivene intervjuiranjem dionika prikazuje tab.2.

Tablica 2.
Rangiranje važnosti mjera prilagodbe putem multikriterijske analize

Mjere prilagodbe Kriteriji	Provedbeni	Klimatski	Ekonomski	Ekološki	Socijalni	Politički i institucionalni	Ukupno
Izrada studija utjecaja klimatskih promjena i ranjivosti te razrada mjera prilagodbe	5	5	4	5	5	4,5	4,75
Izrada izmjenjiva i dopuna zakonodavnog okvira u području regionalnog i prostornog razvoja u koji će se ugraditi obveza izrade procjene utjecaja klimatskih promjena	5	4,5	4,5	4,5	4	4	4,4
Razvoj selektivnih oblika turizma i tzv. „ <i>indoor</i> ponude“	4	4	4,5	4	4,5	4	4,2
Integracija klimatskih promjena u odgojno obrazovne kurikulume, te poticanje znanstveno istraživačkih projekata	5	4	3,5	4	4	3,5	4
Povećanje mjera energetske učinkovitosti i korištenja obnovljivih izvora energije, učinkovitosti sustava grijanja, hlađenja i ventilacije	4	4	4,5	4	4	3,5	4
Informiranje turističkog sektora o lokalno specifičnim klimatskim rizicima	5	3,5	4,5	3,5	4	3	3,9
Izrada smjernica razvoja turističke ponude na održivim načelima	4	4	3,5	4	5	3	3,9
Izrada planova za obranu i jačanje otpornosti turističke infrastrukture od različitih vremenskih ekstrema	5	3,5	4	4,5	3	3	3,8
Provedbe održivog upravljanja vodnim resursima na lokalnoj razini kroz izgradnju samostalnih akumulacija vode, izgradnju pričuvnih sustava za desalinizaciju vode	4	3	4	4	4	4	3,8
Sadnja zelene infrastrukture u svrhu stvaranja prirodnog hlada i smanjenja koncentracije CO ₂	4,5	4	3,5	4,5	3,5	3	3,8
Promocija koncepta prilagodbe klimatskim promjenama u području upravljanja rizicima na regionalnoj, lokalnoj i sektorskoj razini	4,5	4	4	4,5	3	3	3,8
Uključivanje informacija o klimatskim promjenama i klimatskim elementima u promotivne aktivnosti	4	3	4,5	3	4	3	3,6
Provedba prilagodbe plažne infrastrukture na porast razine mora	4	3	4	3	4	3	3,5
Izgradnja valobrana u cilju zaštite turističke infrastrukture	3	3	3	3	4	3	3,2

Izvor: obrada autora

Dionici su ocijenili mjere i može se zaključiti da su po njima najvažnije prve tri mjere i to: izrada studija utjecaja klimatskih promjena i ranjivosti te razrada mjera prilagodbe, zatim izrada izmjena i dopuna zakonodavnog okvira u području regionalnog i prostornog razvoja u koji će se ugraditi obveza izrade procjene utjecaja klimatskih promjena, te razvoj selektivnih oblika turizma i tzv. "indoor ponude". Upravo je razvoj selektivnih oblika turizma ključan za prilagođavanje turističke ponude novim zahtjevima turista koji zbog vremenskih uvjeta (npr. prevelike vrućine, UV zračenja ili kišovitih razdoblja) ne mogu boraviti u prirodi ili provoditi većinu vremena na plaži. Proizvod „sunca i mora“ po kojem je Hrvatska prepoznatljiva treba dopunjavati zdravstvenim, sportskim, kulturnim, robinzonskim, povijesnim, obrazovnim, zabavnim ili nekim drugim oblikom turizma. Svjesni posljedica i negativnih učinaka koje se mogu očekivati, mjere prilagodbe klimatskim promjenama u sektoru turizma trebalo bi čim prije početi primjenjivati. Informiranjem, podizanjem znanja, vještina i upoznavanjem turističkog sektora s klimatskim rizicima te upotrebom pravih tehničkih rješenja omogućio bi se lakši proces prilagodbe na nove situacije.

6. ZAKLJUČAK

Posljedice klimatskih promjena, poput povećanja temperature, povećanja razine mora i razine olujnih nevremena, pojave raznovrsnih bolesti, utjecat će na turističku prepoznatljivost Republike Hrvatske. Zbog tih činjenica veoma je važno da turistička industrija prepozna potencijalne utjecaje i razvija rješenja kako bi djelovala na usmjeravanje dijela turističkih tijekova. Prilagodba klimatskim promjenama je prilagodba prirodnog i ljudskog sustava na sadašnje i očekivane klimatske promjene, a motivirana je ekonomskim, socijalnim i okolišnim činiteljima. Temeljni cilj prilagodbe je smanjiti osjetljivost i negativne učinke klimatskih promjena. Prilagodba je praktičan način navikavanja na trenutne i dugotrajne klimatske promjene, kao i na ekstremne događaje, a njome se koristi u cilju smanjivanja negativnih utjecaja. Da bi se politika prilagodbe mogla provesti, nužne su aktivnosti koje će poduzeti različite institucije, država, ali i samo stanovništvo. U radu su putem multikriterijske analize ocjenjivane sve predložene mjere od strane ispitivanih ključnih dionika, te su mjere poput Izrade studija utjecaja klimatskih promjena i ranjivosti, te razrada mjera prilagodbe i Izrade izmjena i dopuna zakonodavnog okvira u području regionalnog i prostornog razvoja u koji će se ugraditi obveza izrade procjene utjecaja klimatskih promjena najviše rangirane. Može se zaključiti da su upravo spomenute dvije mjere i najvažnije što je dokazano u ovom istraživanju jer ukoliko se ne razrade mjere koje treba provoditi, i to na zakonskoj osnovi, onda će se one teže implementirati u praksi. Međutim, ukoliko integracija klimatskih promjena postane dio regulativnog okvira, tada je osigurano da će se mjere i primjenjivati. Razvoj regulative ima snažan utjecaj na svako poslovanje, pa tako i na turizam. Bez obzira što su ostale mjere nešto slabije rangirane, nikako nije upitna njihova važnost. Primjena mjera prilagodbe ovisi o mnogo čimbenika te treba uzeti u obzir sve moguće probleme i objektivne prepreke. Pravilnom i

kontinuiranom edukacijom, promocijom, uvođenjem odgovarajućih preventivnih aktivnosti i informiranošću turističkih kadrova na svim razinama, sam proces prilagodbe treba integrirati u sve aspekte svakodnevnog poslovanja i u svoje djelovanje u širem društvenom kontekstu. Upravo klimatske promjene zahtijevaju intenzivniji razvoj specijalizirane turističke ponude. Turistički subjekti trebaju osmisliti i istaknuti prednosti novih oblika turizma u novim tržišnim segmentima, poštujući pritom principe održivog razvoja. Poduzimanjem predloženih mjera u radu, prilagodba klimatskim promjenama bit će uspješna i turizam Republike Hrvatske će imati dobru razvojnu perspektivu.

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CONNECTION BETWEEN THE CLIMATE CHANGE AND TOURISM: THE MULTI-CRITERIA ANALYSIS OF ASSESSMENT OF ADAPTATION MEASURES

Abstract

In recent decades global climate has significantly changed which, in turn, has affected the human society and the nature. Disturbance of balance of the global planetary ecological system by increasing greenhouse gas emissions and climate change, which are partly caused by human activity, is one of the biggest challenges of humanity. Climate change as a global phenomenon will affect the changing business conditions in the overall economy, including tourism. In order to overcome this problem, in addition to measures related to climate change mitigation, and in order to minimize the negative impact of tourism on the climate, it is necessary to set measures to adapt the tourism industry to the new situation. The paper explores how the Croatian tourism industry can adapt, and which measures the key stakeholders consider as the most suitable. In order to define the adaptation measures interviews of the key stakeholders in the tourism industry were conducted, and the multi-criteria analysis was used to rank the measures.

Keywords: tourism, climate change, adaptation, multi-criteria analysis

JEL classification: L83, Z32, Q54

PREGLEDNI RAD

REVIEW

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THE RELATIONSHIP BETWEEN ONLINE RATING, HOTEL STAR CATEGORY AND ROOM PRICING POWER

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Abstract

In the digital way of doing business we see a substantial rise of online customer feedback and customer information sharing communities. The role and importance of social media has considerably increased in the past several years and businesses can no longer overlook its impact. For companies, the acceptance of such sources are not only tangential rather they are becoming central in how they approach their operations. Numerous web based platforms that include social networking, online communities and review sites are critical reference points for companies while deciding how to structure and price their products and services. The tourism and hospitality industry is no exception to this phenomenon, as a matter of fact, it is at the very forefront of this new trend that we are observing. Some of these sites are more popular than others, such as TripAdvisor, Booking.com, Travelocity or Expedia but all of them affect how service providers conduct their business, specifically in the area of pricing. The aim of this paper is to examine and quantify the relationship between customer online rating, hotel category and room pricing power in hotel industry. Findings

suggest that there is a statistically significant relationship between hotel star category, online rating and service provider's room pricing power. Moreover, results indicate a strong correlation between TripAdvisor and Booking.com online customer reviews, suggesting that contrary to popular beliefs, TripAdvisor is as reliable as Booking.com.

Keywords: *electronic word-of-mouth, pricing power, hotel star category, online rating*

1. INTRODUCTION

The main motivation of this research is to examine how hotel star rating, online reviews and room pricing power are related to each other. There was a need to conduct this research since we have noticed a lack of proper analysis with the aforementioned focus and some of the fundamental relations including whether there are any benefits of investing in hotel star rating in order of attaining better room prices. One research that attempted to examine some of these relations was done by Ilieva and Ivanov (2014) and we have decided to extend the understanding of these relations with our research and the focus on hotels from Dubrovnik-Neretva County.

The whole area of real-time sales communications and availability of new online reviewing opportunities for customers is seriously affecting the business practice of all hotels that are using Internet as their sales channel. Therefore, the authors believe, that the topic as such deserves additional and appropriate attention. Customers progressively rely on substitute sources of evidence such as "online word of mouth". Researchers have proven that customer produced service or product information on the Internet draws more attention than seller information among customers (Bickart and Schindler 2001). In comparison to product reviews provided by service or product providers, customer feedback is by definition, more customer oriented. Customers portray the product in terms of alternative usage situations and assess it from the user's perspective (Chen and Xie 2008). Even though customer evaluations are subjective in nature, such assessments are repeatedly considered more reliable and trustworthy by customers than conventional sources of information (Bickart and Schindler 2001).

2. ELECTRONIC WORD-OF-MOUTH

Electronic word-of-mouth is defined as a positive or negative statement made online by potential, actual or former customers regarding goods and services (Hennig-Thurau et al., 2004). There are other terms that are closely related to electronic word-of-mouth such as online customer community or user-generated content. The underlining characteristics for all of them are that they became a major source of information for travel consumers: individuals are

increasingly utilizing information from these websites to make travel-related decisions and to shape perceptions and images about destinations and travel offerings (Fotis, Buhalis, and Rossides, 2012; Cox et al., 2009). Cheung, Lee and Rabjohn (2008) described the term:

[...] electronic word-of-mouth can also be considered as the extension of traditional interpersonal communication into the new generation of cyberspace(2008, p.231).

The most famous and well known online customer feedback communities that deal with hotel recommendations are TripAdvisor, Expedia, and Booking.com (Gal-Oz, Grinshpoun and Gudes, 2010). However, Stebbins (2015) argues that TripAdvisor is not a reliable source since anyone can post and rate any company regardless whether they experienced their services or not since they do not need to verify their status when it comes to actual service consumption. That increases the risk of competitors posting negative comments and negatively rating a company that they are competing against, or we may have a unfair practice where individuals positively comment and rank the service provider even though he or she did not experience the service.

Stebbins (2015) suggests that Expedia and Booking.com are more reliable online feedback platforms compared to TripAdvisor, because of utilization of security policies that only allow actual/verified customers to comment and rank.

Due to services being intangible and perishable, potential customers are relying more and more on electronic word-of-mouth [eWOM] to get an insight in value of services (Park and Lee, 2009). Yoo and Gretzel(2011) show the importance of electronic word-of-mouth in bookings through their survey which shows that more than 74% of travelers take in the consideration online comments when planning a trip. Also, Zhu (2010) revealed in his study that electronic word-of-mouth is significantly influencing customers purchasing decisions. Moreover, there are authors that claim that customers are more influenced by early negative reviews (Sparks and Browning, 2011).

When researching word-of-mouth, Mahajan described two metrics: *volume* and *valence* of reviews (Mahajan et al., 1984). Volume tends to be described as amount of customer to customer communication and valence as rating values towards products (Neelamegham and Chintagunta, 1999; Liu, 2006). Valence shows the quality of goods and services based on customers' preferences (Duan et al., 2008). Valence has a substantial impact on customers' purchasing decision because they perceive word-of-mouth as trustworthy information (Grewal et al., 2003). The more reviews there are, the overall rating will be a better indicator of quality (Chen et al., 2004).

Electronic word-of-mouth is particularly important for hotels since they offer experience goods instead of search goods (Ye et al., 2009). Former researchers claim that customers are more influenced by word-of-mouth

regarding experience goods (Park and Lee, 2009; Senecal and Nantel, 2004; Weather et al., 2007). Chevalier and Mayzlin claim any publicity is not necessarily good publicity. They proved that very low ratings affect customers' purchasing decision more than high ratings (Chevalier and Mayzlin, 2006).

To support this theory, the impact of hotel average rating on booking was investigated. Findings suggest that hotels with higher average rating have more bookings than those who have low average rating (Ye et al., 2011). However, the research conducted was limited in scope (sample) so the results may not be generalized.

3. ROOM PRICE AND NEW CHANNELS OF SALES

According to Völckner and Hoffmann (2007) *cue utilization theory* in tourism suggests that consumers infer information from product-related attributes at first and when faced with uncertainty consumers will more likely rely on information cues related to quality. Moreover, informational effect of price suggests that higher price implies higher quality that should make purchasing more likely to happen (Völckner and Hoffmann, 2007). However, signaling theory suggests that when the customer is faced with choice between two vendors, she will choose an inferior one. Qi and Qiang (2013) suggest that in order to avoid such an outcome superior companies need to send the right *signal* to their customers. Furthermore, the suggestion is that the right *signal* can be a good reputation which leads to brand recognition and customer loyalty. Vermeulen and Seegers (2009) support this suggestion particularly in the hotel industry, as the guests of hotels with strong brand recognition are less affected by negative word-of-mouth.

Consumer purchase behavior involves consumer's attitudes, preferences, intentions, and decisions regarding the consumer's behavior in the marketplace when purchasing a product or service (Velumani, 2014). Dubois and Laurent (1994) emphasize emotional responses while using a product which shape purchasing behavior. When customers feel happiness, excitement or fun they will not mind high prices of products. Since staying at the hotel is perceived as a hedonistic experience that can cause feelings of happiness, excitement and fun, where guests are less likely to engage in decision making based on price. However, higher price is related to higher risk as well. To reduce the risk, guests will rely on electronic word-of-mouth to check whether price ensures a quality (Wang et al. 2013). A study conducted by Anderson argues that:

[...] if a hotel increases its review scores by 1 point on a 5-point scale (e.g., from 3.3 to 4.3), the hotel can increase its price by 11.2 percent and still maintain the same occupancy or market share. By matching ReviewPRO's Global Review Index™ with STR's hotel sales and revenue data, a regression analysis finds that a 1-percent increase in a hotel's online reputation

score leads up to a 0.89-percent increase in price as measured by the hotel's average daily rate (ADR). Similarly, this 1-percent increase in reputation also leads to an occupancy increase of up to 0.54 percent. Finally, this 1-percent reputation improvement leads up to a 1.42-percent increase in revenue per available room (RevPAR) (2012, p. 5).

On the other hand, these finding can go both ways, meaning that low ranked hotels have to decrease their prices in order to maintain the same occupancy rate (Anderson, 2012).

4. PRICING POWER

Diana-Jens and Ruibal (2015) deem that price is one of the most significant variables in the business marketing strategy, since even a slight price change can have a critical impact on the hotel's bottom line. Therefore, revenue managers and revenue management in general must consider prices and inventory very diligently in order to optimize revenues through the correct distribution channel.

Today's business environment, and hotel industry in particular, is described as highly competitive. With the introduction of customers as an active factor of opinion and buying decision making process, corporate price policies are under further pressure bynot being able to exercise their traditional price strategies and approaches. The company's ability to raise the price of a product without affecting its demand is traditionally defined as pricing power (D'Aveni, 2010). It is expected that with the increased transparency in pricing strategies, companies with low pricing power will primarily depend on outside factors, such as aggressive competitors and customers (Cooper, 2011) which may significantly weaken their ability to attain their business objectives. Rare events can increase demand in hotels noticeably, such as World Cups, the Olympics, religious or political conventions or the like. Consequently, during those events, hotels can increase their prices significantly without disturbing occupancy level. However, there is an emergence of competitors traditional and non-traditional, that pose a threat to pricing power in hotels (Karmin, 2015).

5. HOTEL STAR RATING

According to Qi and Qiang (2013), star rating has similar effect on pricing as electronic word-of-mouth because it is an indicator of quality and a measurement of level of facilities and service standards. However, star rating is different from brand recognition and reputation. Hotels with higher star ranking are usually higher priced and guests have to review the tradeoff between benefits and costs. Besides, there are hotels with lower star ratings that have a good

reputation and brand recognition. Furthermore, Qi and Qiang suggest that since guests have less information about hotels with lower star ratings, electronic word-of-mouth is more influential. Also, customers expect hotels with high star ranking to have higher quality so they will not necessarily need to review other's feedback (Qi and Qiang, 2013).

Hotel star rating systems are meant to provide an accurate and objective assessment of accommodations according to established criteria and guidelines yet Grossman (2004) argues that one must be very careful with star rating systems and its weight on decision making since different websites offer different star ratings, even for the very same hotel. In his study, he revealed that nine different websites gave diverse information about star rating of the same hotel. According to this author, most ratings systems are poorly or completely unregulated, rendering them almost completely worthless. The study further suggests that different set of rules and measures for determining hotel star rating are becoming less reliable. In the research done by Agarwal (2012), it was evident that five different countries have vastly different star rating systems and therefore these are becoming less dependable as a critical guideline of purchasing decision made by customers. There are efforts, such as Hotrec's ('Hotrec, hotels restaurants' 2015) representing the hotel, restaurant and cafe industry in Europe, to try and create a system of hotel star rating that should truly be a standardized methodology across European countries. The initiative hopes to reduce the star rating confusion and offer more transparency in how hotels are presented to customers. With all its potential problems, hotel star rating still represents a major factor for both customers and service providers and major investments in star category upgrades are considered important.

6. METHODOLOGY

The aim of this study was to explore the interaction between hotel star ratings, online WOM (specifically, average scores of online customer reviews), and pricing in the hotel industry. Publicly available data about all hotels operating in Dubrovnik – Neretva County was obtained through the official website of the Croatian Ministry of Tourism. For the purpose of this research, only three, four and five star hotels were included. Out of 69 hotels in total, seven hotels had to be excluded from the analysis as the required data was unavailable. Since room price is classified information, publicly available room price was examined, by looking at average prices of hotels in November of 2015 for the period from 11th to 18th of June 2016. The price of the hotel includes 2 beds/room and a breakfast. That specific information was obtained through the *Kayak.com* webpage. That time period was chosen as it is neither high season or low season and the assumption was that it can stand as a good estimate of average price.

Online customer reviews/ratings were collected from *TripAdvisor.com* [TAC] and *Booking.com* [BC]. Both sites provide the data on the average review score for hotels, yet different types of ratings are used. TAC offers the opportunity to rate hotels on a scale from 1 (terrible) to 5 (excellent). Booking.com rates hotels on a scale from 1 to 10, assuming 1 is the worst and 10 is the best grade. As both sets of ratings were crafted in a manner for semantical distance between consecutive levels to be kept roughly constant primarily treated as continuous variables. Data was collected by comparing reviews from the past against room pricing in the future. The implicit assumption in this analysis was that the hotels are not significantly modifying their product in the off-season, giving them reason to raise prices. Big off-season upgrades might give hotels a reason, not reflected in their current reviews, to upgrade prices.

Additional assumption was that the hotels were pursuing revenue maximization strategies (ADR and/or RevPar) as opposed to occupancy building strategies where hotels were not engaging in aggressive pursuit of price penetration strategy to increase occupancy that would cause their online prices to be somewhat disconnected from their online ratings.

7. RESULTS

Out of 62 hotels for which the data was collected, 30 were three star hotels (48,4%), 17 four-star hotels (27,4%) and 15 five star hotels (24,2%). In terms of size of hotels, three star hotels examined ranged from smallest three room hotel to the largest three-star hotel with 338 rooms available, four star hotels included a range from smaller 8 room hotels to largest 385 rooms hotel, and five star hotels included a range from smaller 12 room hotels to largest 480 rooms hotel.

In terms of numbers of reviews on TAC, the number of reviews for three star hotels ranged from minimum of two reviews per hotel to the maximum of 710 reviews, for four star hotels minimum number was 52 reviews per hotel and maximum 1643 per hotel, and for five star hotels minimum was 234 reviews per hotel and maximum 2078 reviews per hotel. In terms of numbers of reviews on BC, number of reviews for three star hotels ranged from minimum of six reviews per hotel to the maximum of 1535 reviews, for four star hotels minimum number was 33 reviews per hotel and maximum 1189 per hotel, and for five star hotels minimum was 70 reviews per hotel and maximum 1582 reviews per hotel. For the purpose of data analysis conducted here, the average score review score for hotels retrieved from TAC and BC was used.

As noted, the reliability of *TripAdvisor.com* ratings tend to be questioned, as the site does not control whether the reviewer actually experienced the service, whereas *Booking.com* scores are perceived as more reliable precisely as such control is embedded in the review system. Spearman's rank-order correlation was run to determine the relationship between grades hotels received on these two sites.

There was a strong, positive correlation between the grades on various sites, which was statistically significant ($r_s(60) = .717, p < .001$). Given the strong correlation, composite variable for ‘eWOM rating’ was calculated. Given the nature of the data, and the important distinction to be observed in this variable, though this is not without controversy, median split was applied to generate one categorical variable, grouping the ratings into a higher and lower category. An additional problem with the data initially retrieved regarded the unequal sample sizes in terms of hotel star rating category; the results of Levene’s test were indicative that the homogeneity of variances assumption was not violated ($F=1.49, p=.21$). Star rating was expected to have an effect on pricing, and the two-way analysis of variance was conducted to check whether that effect is equal at all levels of the online rating variable. As expected, there was a significant main effect for star rating on pricing ($F(2,47) = 12.475, p < .001$), such that the pricing was significantly higher in five star hotels ($M=186.34, SD=16.36$), than in four star hotels ($M=135.82, SD=11.48$), or three star hotels ($M=91.15, SD=10.70$).

Table 1.

Star Rating Pairwise Comparisons

(I) Star rating	(J) Star rating	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
					Lower Bound	Upper Bound
3*	4*	-44,671*	15,691	,007	-76,237	-13,105
	5*	-95,194*	19,547	,000	-134,517	-55,870
4*	3*	44,671*	15,691	,007	13,105	76,237
	5*	-50,523*	19,986	,015	-90,729	-10,317
5*	3*	95,194*	19,547	,000	55,870	134,517
	4*	50,523*	19,986	,015	10,317	90,729
Based on estimated marginal means, dependent variable: Publicly available ADR in USD 11.-18.06.2016.						
*. The mean difference is significant at the ,05 level.						
b. Adjustment for multiple comparisons: LSD.						

Source: authors' research

Arguably, a more interesting result obtained is that there was a statistically significant interaction between the effects of star rating and the effect of customer online rating with regard to pricing data, $F(2, 47)= 4.641, p=.014, \eta^2=.165$.

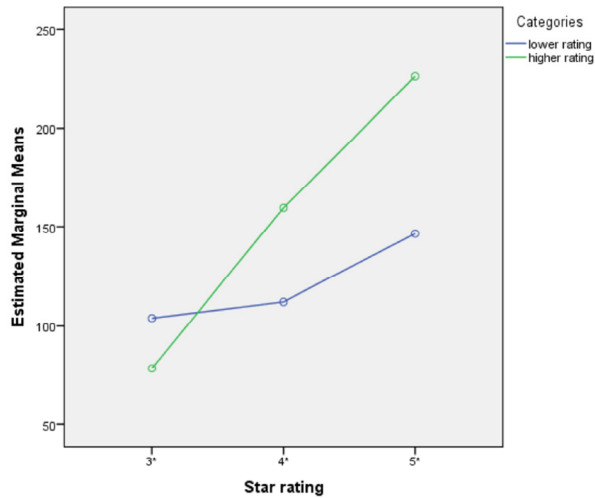


Figure 1 Estimated Marginal Means of Publicly Available ADR (in USD)

Source: authors' research

Table 2

Tests of Between-Subjects Effects

Dependent Variable: Publicly available ADR in USD 11.-18.06.2016.						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	133652,442 ^a	5	26730,488	14,753	,000	,611
Intercept	602308,662	1	602308,662	332,432	,000	,876
Star rating	45203,311	2	22601,655	12,475	,000	,347
Ratings cat	9139,245	1	9139,245	5,044	,029	,097
Star rating * Ratings cat	16818,286	2	8409,143	4,641	,014	,165
Error	85155,671	47	1811,823			
Total	1269683,000	53				
Corrected Total	218808,113	52				
a. R Squared = ,611 (Adjusted R Squared = ,569)						

Source: authors' research

Intriguingly, for three star hotels, hotels with lower ratings were higher priced, but the difference in pricing for hotels with higher and lower online ratings for the three star hotels was not significant.

Table 3

Star rating* - Online rating

Dependent Variable: Publicly available ADR in USD 11.-18.06.2016.					
Star rating	Categories	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
3*	lower rating	103,895	9,765	84,250	123,540
	higher rating	78,400	19,036	40,105	116,695
4*	lower rating	112,000	19,036	73,705	150,295
	higher rating	159,636	12,834	133,818	185,455
5*	lower rating	146,500	30,098	85,950	207,050
	higher rating	226,182	12,834	200,363	252,000

Source: authors' research

There is a statistically significant difference in pricing for hotels with higher and lower online ratings for the four star hotels ($F(1, 47) = 4.305, p = .04, \eta^2 = .09$), and for five star hotels, $F(1, 47) = 5.93, p < .02, \eta^2 = .11$, with hotels with higher ratings in both categories being more expensive.

8. CONCLUSION

The intention of this research was to explore the relationship between star rating, online reviews and room pricing power. Lately we are witnessing the debate on continuous quality improvements with regard to hotel services offered, where star rating is viewed as one of the key factors in how quality is measured and perceived. The decision of investing in hotel star rating in order to attain better room prices is ultimately based on the cost-benefit analysis of each individual hotel with evidence showing that such investments are worth making yet some overall conclusions are still elusive in hotel star rating relation with customer's perception of the actual service being delivered.

As anticipated, star rating had a significant main effect on pricing, such that the pricing was significantly higher in five star hotels than in four star hotels or three star hotels. This result may not and should not be a surprise but in this paper this was just a starting point with an additional construct being introduced, customer's feedback. With online reviews as the third element included in the model, results reveal that hotel's higher star rating implies higher online review and, ultimately, hotel's higher online reviews are positively related to higher pricing power. We may attribute this to the customer's post purchase behavior as related to upscale purchases versus less upscale purchases where down-market customers are more critical in their reviews. The argument is that buyers of cheaper products, knowing that they are buying a cheaper or less expensive version of the product/service, are more likely to be looking for faults with the product/service than those who buy a costlier version. The concept may work the other way around as well, i.e. customers using upscale product/service could idealize the fact that they stayed in a 5-star hotel.

Another suggestion may be that even though customers were satisfied with services they received in 3-star hotels, they would still be unwilling to give the highest rating possible due to unconsciously comparing it with 5-star hotels. The question here is whether cognitive dissonance can be applied to hotel rooms since the counter argument may be that this is a neutral or irrelevant point because down-market customers may lack exposure to other, better, upscale hotels and therefore this should not affect their review within the market segment that they are usually consuming. This represents a potential area of future research where guests would share their hotel or star rating preference or star rating experience exposure. Additionally, this study did not take into consideration the origin or country of residence of online reviewers. This represents another potential topic since people from different countries do not have uniform opinions or ideas as to what 3-star or 5-star hotels should provide. Potentially, one can survey people from all around the world to see what they consider a 3-star hotel looks like and do the same for 5-star hotels where it might be discovered that the conception of 5-star service is more uniform than that of 3-star service.

Additional interesting outcome that is worth commenting is that within the cluster of hotels that are categorized as 4-star and 5-star hotels we saw a statistically significant difference in pricing for hotels with higher and lower online ratings, with hotels having higher ratings in both categories being more expensive. This leads to a conclusion that those hotels that receive more favorable customer reviews have a higher pricing power even within their own cluster and consequently they have the ability to increase the room price. This finding is in line with research conducted by Anderson (2012). The aforementioned notion was not replicated with 3-star hotels. In the 3-star hotels cluster, hotels with lower ratings were those higher priced. The explanation may be that those who were booking 3-star hotels were predominantly price-driven and that reviews were not reflecting the actual service received.

One of the research results also indicates a positive correlation between two major online travel review web sites, TripAdvisor and Booking.com, which initially was not anticipated. As mentioned, TripAdvisor is not perceived as a reliable source of data due to lack of customer review validation procedure. However, these results suggest that TripAdvisor is as reliable as Booking.com (that has customer review validation procedure). This result is highly important for those who plan their trips via TripAdvisor and search for more information regarding hotels on that website.

Another limitation of the study was that authors did not have access to business mix models that hotels are employing and where distribution of group and individual guest arrivals were visible, nor were the hotel occupancy levels available. This situation might have affected the results of the research. Hypothetically, the online price of hotels highly booked with groups would probably reflect a price skimming strategy and not truly reflect the value suggested by the online review ratings. In contrast, hotels with no group business and the same online rating, would probably set prices lower than hotels with group arrivals.

Future research may include analysis of 3-star hotels not being reported as good by linking it to hotel ownership, i.e. the study could explore and compare government and privately owned, independent and chain, domestic and foreign hotels, to investigate whether these factors would determine and influence rankings and pricing. Overall, authors believe that there are numerous pathways that still need to be explored within this area. Additional answers and better understanding of these concepts would help industry experts and academic community alike.

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ODNOS IZMEĐU ONLINE OCJENE, KATEGORIJE HOTELA I POTENCIJALA ZA ODREĐIVANJE CIJENA SOBA

Sažetak

U vrijeme digitalizacije poslovanja svjedočimo porastu i važnosti povratne informacije klijenata i zajednica u kojima klijenti razmjenjuju informacije. Uloga društvenih medija značajno je porasla u posljednjih nekoliko godina, te poslovne tvrtke ne mogu više zanemarivati njihov utjecaj. Takvi izvori nisu više samo usputni, već u središtu pažnje tvrtki u razmatranju poslovnog pristupa. Brojne internetske platforme koje uključuju društveno umrežavanje, online zajednice i stranice koje objavljuju recenzije postale su kritične referentne točke tvrtkama pril odlučivanju o strukturi i cijeni proizvoda i usluga. Turistička i ugostiteljska industrija nije iznimka, već je predvodnik ovog novog trenda. Neke od ovih stranica popularnije su od drugih, poput: TripAdvisor, Booking.com, Travelocity ili Expedia, ali sve utječu na način na koji pružatelji usluga vode svoj posao, posebice prilikom određivanja cijena. Cilj ovog rada je istražiti i odrediti odnos između online ocjene klijenta, kategorije hotela i potencijala za određivanje cijena u hotelskoj industriji. Rezultati istraživanja upućuju na postojanje statistički značajne povezanosti između kategorije hotela, online ocjene i potencijala za određivanje cijena. Osim toga, rezultati pokazuju značajnu povezanost između TripAdvisor i Booking.com online recenzije klijenata, što pokazuje da je, usprkos uvriježenom mišljenju, TripAdvisor jednako pouzdan kao i Booking.com.

Ključne riječi: elektronska usmena predaja, potencijal za određivanje cijene, kategorija hotela, online ocjena.

JEL klasifikacija: M14, M31, J24, L86

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STRUCTURAL CHANGE IN CROATIAN REAL GDP GROWTH RATES

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JEL klasifikacija / JEL classification: C13, C32

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Abstract

Markov switching model captures the sudden changes in the observed series using exogenous variable which is unobserved and follows a stochastic process. This research fits Markov switching model to quarterly real GDP growth rates in Croatia for the period 2000:1 to 2016:2 in order to analyze changes in mean over time. Research results show that Croatian GDP growth rates are regime dependent. Markov switching model with two regimes detects shifts in Croatian GDP growth rates. Consistently with the previous similar researches, the research results indicate long lasting recession period and sluggish Croatian economy.

Key words: Markov model, regimes, GDP, Croatia

1. INTRODUCTION

Modelling nonlinear economic time series using regime switching models has gained in popularity in the past two decades. Sudden shifts or breaks in an economic time series violate the linearity and so make an observed series nonlinear. It is often the case due to arising economic or financial crises within the observed time series. One possibility could be the splitting of the observed time series. The splitting of the observed time series as a result can have two series of different properties, one containing the period before the crises and another one containing the period after the crises and then estimate the separate

¹ Many thanks to the anonymous reviewers for careful reading and their highly appreciated comments.

models for separate series exhibiting different behaviour patterns or regimes. So the result would be the piecewise linear model. As a matter of fact, this approach would provide a valid result for estimates of the changes but information regarding development of the series or its evolution would be lost. To adequately capture the information on development and evolution of such time series exhibiting different properties in a different time periods Hamilton (1989) proposed Markov switching autoregressive (MS-AR) model. MS-AR model is one of the most popular regime switching models that explains development of the observable time series depending on the unobserved regime variable. The main aim of this paper is to fit Markov Switching model on the real gross domestic product (GDP) growth time series in Croatian economy and determine the switching points between expansion and recession periods. Škare and Stjepanović (2013) examined output fluctuations in Croatia under fractional integration framework and found macroeconomic shocks in Croatian real output highly persistent. Krznar (2011) observed the time period from the year 1998 up to 2010 and identified the end of the first recession in mid-1999 and the start of the second recession in the third quarter of 2008. This paper further examines real GDP growth rate in Croatia and trying to identify its structural changes including the period after the year 2010..

The paper consists of five parts. After the first, introductory part, the second part provides a brief literature overview. The third part of the paper presents the proposed empirical strategy and methodology and the fourth part presents results of the study. The fifth part refers to the conclusion.

2. BRIEF LITERATURE OVERVIEW

Hamilton (1989) extended Markov switching regression developed by Goldfeld and Quandt (1973) and applied the extended model to the US real GNP growth rates. Hamilton (1989) illustrated that real GDP growth in US is characterized as an autoregressive model with a switching mean. The mean has been found to switch between low and high growth regimes and the estimated time of the low growth regime corresponded to the dates of recessions in US as provided by the Business Cycle Dating Committee of the National Bureau of Economic Research. Following aforementioned Hamilton's paper, regime switching model is frequently applied to model real GDP growth rates and to identify the shifts and phases of the business cycles (Beaudry and Koop, 1993; Tiao and Tsay, 1994; Potter, 1995; (Pesaran and Potter, 1997; Chauvet, 1998; Van Dijk and Franses, 1999; Kim and Nelson, 1999; Öcal and Osborne, 2000; Kaun, 2002; Kim, Morley and Piger, 2005). Kaun (2002) points out that GDP growth rates stay at a relatively lower level and less persistent during contractions while during expansions typically fluctuate around a higher level and are more persistent. The model proposed by Hamilton (1989) is univariate model, since the real GDP is the only variable the model takes into account. To take into account other relevant economic indicators, Stock and Watson (1989) proposed

the kind of its multivariate form. Stock and Watson (2002) using principal components analysis on a large number of predictors developed the series that afterward was modelled using Markov switching model. Chauvet (1998) suggests dynamic factor model version. Afterwards, Forni, Hallin, Lippi and Reichlin (2005) proposed the generalized dynamic factor model. Besides the structural change in mean, there is a possibility to allow structural change in the variance of residuals as well (McConnell and Quiros, 2000; Albert and Chib, 1993; Chauvet and Piger, 2003). Kim (2009) proposed the Markov-switching model with endogenous explanatory variables.

In addition to its application in explaining GDP dynamics, the Markov switching models have been successfully applied in a wide range of economics and finance. Rapach and Wohar (2002) studied regime changes in international real interest rates. Chib et al. (2011) and Bianchi (2013) fitted the Markov switching model and provide evidence for regime shifts in the inflation response. Ricci-Risquete, Ramajo and De Castro (2016) using Markov switching approach address the issue of Time-varying effects of fiscal policy in Spain. So there is a number of Markov switching model varieties and its application is extensive. These models have been successfully applied to GDP growth in larger and less volatile economies than the Croatian. The contribution of this paper is to estimate Markov switching model fitted for real GDP growth rates of the small open Croatian economy.

3. EMPIRICAL STRATEGY AND CORRESPONDING METHODOLOGY

In economics, the average growth rate of GDP tends to be higher in expansions than in recessions. Furthermore, expansions tend to last longer than recessions. Therefore the GDP growth rate dynamics might be state dependent. To address this issue nonlinear models are often applied. The vast majority of empirical researches assume that the GDP growth follows a random walk with drift whose stationary differences evolve according to an autoregressive Markov switching process (Clements and Krolzig, 2004; Kim, Morley and Piger, 2005; Chauvet and Hamilton, 2006; Camacho and Quiros, 2007).

The two state Markov-switching model assumes that expected real GDP growth rates differ in period of recession and period of expansion:

$$E(y_t) = \mu_1 \quad (1)$$

$$E(y_t) = \mu_2 \quad (2)$$

where:

y_t - denotes the observed time series at time t ,

μ_1 - denotes the expected mean of the series during the period of expansion and

μ_2 - denotes the expected mean of the series during the period of recession.

In other words :

$$E(y_t) = \mu_{s_t} \quad (3)$$

where: $s_t = \{0,1\}$ indicate state of the economy i.e. expansion or recession.

Consequently, Markov switching model can be formulated in the equation (4):

$$y_t = \mu_{s_t} + \varepsilon_t \quad (4)$$

Economic time series often exhibit the strong dependence between the past observations. In that case autocorrelation among residuals in the estimated model is present and obtained estimates may not be valid. Assuming the residuals being AR(1) process leads to the equation (5):

$$\begin{aligned} \varepsilon_t &= \rho \cdot \varepsilon_{t-1} + u_t \\ y_t &= \mu_{s_t} + \rho \cdot (y_{t-1} - \mu_{s_{t-1}}) + u_{s_t,t} \\ u_{s_t,t} &\sim IIN(0, \sigma^2) \end{aligned} \quad (5)$$

The essential idea of the model is that the observable time series vectors depend on the unobserved regime variable. The residuals of the estimated regression models are normally distributed. Variance of the residuals in the equation (5) ($u_{s_t,t}$) may be regime dependent or constrained to be the same in both regimes.

The first order assumption states that the probability of being in a regime depends on the previous state. So the first order assumption may be expressed by the equation (6).

$$P(s_t = k | s_{t-1} = i) = p_{i,k} \quad (6)$$

Even though is not required, it's often assumed that transition probabilities are not time dependent, time invariant or constant. In that case, the equation (7) holds.

$$p_{i,k}(t) = p_{i,k} \quad (7)$$

Transition probabilities to stay in the same state are given by equations (8) and (9):

$$P(s_t = 0 | s_{t-1} = 0) = p \quad (8)$$

$$P(s_t = 1 | s_{t-1} = 1) = q \quad (9)$$

Following total probability theorem, transition probabilities to change the state can be expressed in the equations (10) and (11):

$$P(s_t = 1 | s_{t-1} = 0) = 1 - p \quad (10)$$

$$P(s_t = 0 | s_{t-1} = 1) = 1 - q \quad (11)$$

The estimates are obtained by maximising a conditional log likelihood function $\ln[f(y_t|y_{t-1}, \dots, y_1)]$.

In this research two state Markov process is applied and therefore two transition probabilities need to be obtained. The property of the transition probabilities can be evaluated recursively so that each step begins with filtered estimates of the regime probabilities for the previous period. This procedure is called one-step ahead prediction of the regime probabilities. Eventually given the parameter estimates, the inference on s_t is made following Hamilton (1989). So following Hamilton (1989), current value of s_t depends only on the immediate past value. It is unknown in which state the process is but the probabilities can be estimated. The process can switch between states repeatedly over the sample. So, state dependent parameters, transition probabilities and the expected duration of states will be estimated.

4. EMPIRICAL RESULTS AND DISCUSSIONS

The data sample consists of real GDP growth rates, comparison with corresponding quarter of previous year from first quarter 2000 up to second quarter 2016 are taken from Croatian Bureau of Statistics (quarterly gross domestic product by expenditure approach, constant previous year prices). Table 1 shows the descriptive statistics of the sample data.

Table 1

Descriptive statistics for Croatian real GDP growth rates

Parameter	Croatian real GDP growth rates (%)
Mean	1,71
Median	2,77
Maximum	6,85
Minimum	-8,62
Std. Dev.	3,59
Skewness	-0,90
Kurtosis	3,58
Jarque-Bera	9,91 (0,07)
No. of observations	66

Source: Author

Table 1 shows the descriptive statistics for Croatian real GDP growth rates. Descriptive statistics show wide range of Croatian real GDP growth rates. Minimum recorded real GDP growth rate is recorded in the first quarter of 2009

and amounts -8,62%, while the maximum recorded real GDP growth rate is recorded in the first quarter of 2007 and amounts 6,85%.

In what follows Markov switching model formulated in the equation (4) is estimated and parameter estimates are summarized in Table 2.

Table 2

Parameter estimates for the Markov switching model

Variable	Coefficient	t-value	p-value
RECESSION			
C	-1,55	-2,14	0,03
EXPANSION			
C	4,29	14,24	0,00

Source: Author

Out of Table 2, the one can see the regime specific mean estimates. Estimated mean for the recession regime is negative and amounts -1,55% while the estimated mean for the regime of expansion amounts 4,29%. Krznar (2013) obtained similar results i.e. 4,4% for the regime of expansion and -2,8% for the regime of recession. However, diagnostics checking indicate existence of serial correlation in residuals (figure 2 and figure 3 in the appendix). Correlogram indicates similar pattern for the regime of expansion and regime of recession. Looking at the autocorrelation function (ACF) and partial autocorrelation (PACF) plots one can see that PACF "cuts off" after lag one while the ACF decays more slowly for the regime of expansion as well as for the regime of recession. Following ACF and PACF plot the residuals might be AR(1) process and Markov-Switching AR(1) model given by equation (1) is estimated. Table 3 shows the estimates for Markov-Switching AR(1) model.

Table 3

Estimated Markov-Switching AR(1) model for Croatian real GDP growth rates

Variable	Coefficient	t-value	p-value
RECESSION			
C	-1,68	-0,66	0,50
EXPANSION			
C	7,17	2,36	0,01
Common coefficient			
AR(1)	0,93	13,51	0
LOG(SIGMA)	0,21	2,27	0,02
Transition Matrix Parameters			
P11-C	4,20	3,29	0,00
P21-C	-4,11	-3,11	0,00

Source: Author

Table 3, the one can see the regime specific mean estimates. Estimated mean for regime of recession is negative and amounts $-1,68$ while the estimated mean for regime of expansion amounts $7,17$. Regime specific mean estimates are followed by common coefficients estimates and transition matrix parameters representing the logistic coefficients for the regime probabilities. Furthermore, diagnostics checking indicate normality of residuals (Figure 4 in the appendix) and no serial correlations among residuals (Table 6 in the appendix). Hamilton (1994) shows that if the roots lie inside the unit circle, the estimated AR process is stable. Since in the presented model no root lies outside the unit circle and the modulus is less than one (amounts $0,93$), AR meets the stability requirement.

Following the fitted Markov-Switching AR(1) model, Figure 1 shows the Real growth rate time series dynamics in Croatia.

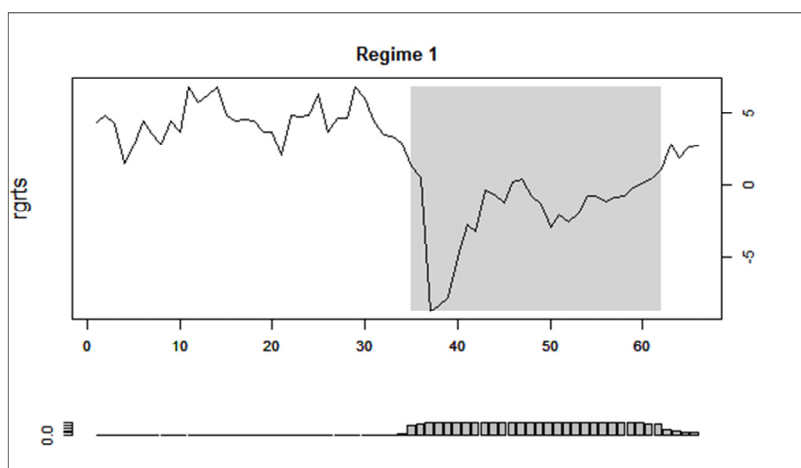


Figure 1 Real growth rate time series (rgrts) and recession (Regime 1) in Croatia
Source: Author

Figure 1 illustrates that the recession period in Croatia that started in the third quarter of 2008 ended in the third quarter of 2015.

Figure 1 shows smoothed and filtered probabilities for recession (Regime 1) and expansion (Regime 2) in Croatia.

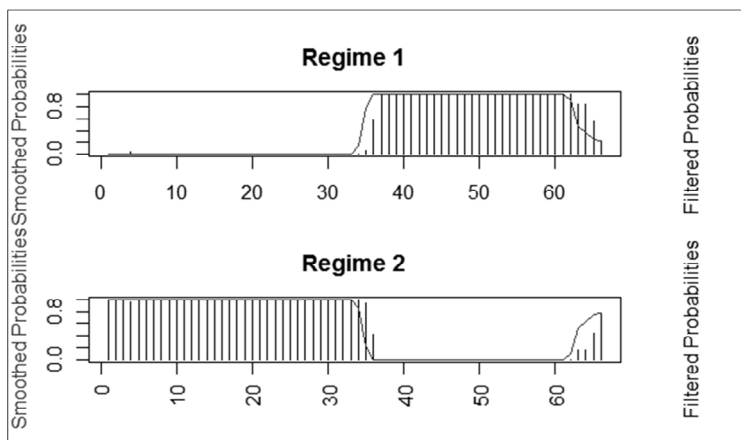


Figure 2 Smoothed and filtered probabilities for recession (Regime 1) and expansion (Regime 2) in Croatia

Source: Author

Smoothed and filtered probabilities for recession (Regime 1) and expansion (Regime 2) in Croatia indicates end of the recession in the third quarter of 2015.

Table 4 shows the matrix containing the probabilities of transition between the states.

Table 4

Constant transition probabilities $P(i, k) = P(s(t) = k | s(t-1) = i)$ (row = i / column = j)

	Expansion	Recession
Expansion	0.98	0.02
Recession	0.02	0.98

Source: Author

The time-varying probabilities in Table 3 show considerable state dependence in the transition probabilities.. Probability of staying in expansion ($P(s_t = 1|s_{t-1} = 1)$) amounts 0,985269, while the probability of staying in recession ($P(s_t = 2|s_{t-1} = 2)$) amounts 0,983828. Here presented research results are consistent with Škare and Stjepanić (2013) who found long memory property of GDP growth rates in Croatia.

Expected duration for each state is presented in Table 4.

Table 5

Constant expected durations

Regime	Expansion	Recession
Expected duration	67.88213	61.83626

The expected duration of the regime of expansion and regime of recession is approximately the same indicating that GDP growth rates will remain in the origin state for a long time before moving to the second state. Conclusively the research results clearly indicates long lasting recession period in Croatia and therefore needs for structural changes in Croatian economy.

5. CONCLUDING REMARKS

The Markov switching model fitted in this paper captures the sudden changes in Croatian real GDP growth rates using exogenous variable which is unobserved and follow a stochastic process. There are several conclusions that can be drawn out of the research presented in this paper. Firstly, there is regime switching structure in the Croatian quarterly real GDP growth rate. Secondly, Croatian real GDP growth rate is well fitted by proposed Markov-Switching AR(1) model and the filtered probabilities can be extracted. The estimated results show start of the recession in the third quarter of 2008 and in the first quarter of 2009 real GDP growth rate reached its minimum in amount of -8,62%. The recession ended in the third quarter of 2015. Thirdly, shocks affecting real output in Croatia have long lasting effects. The research results are consistent with previous similar research pointing out on the long memory property in the Croatian economy. Long lasting recession period identified out of this research clearly points on needs for structural changes in Croatian economy.

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APPENDIX

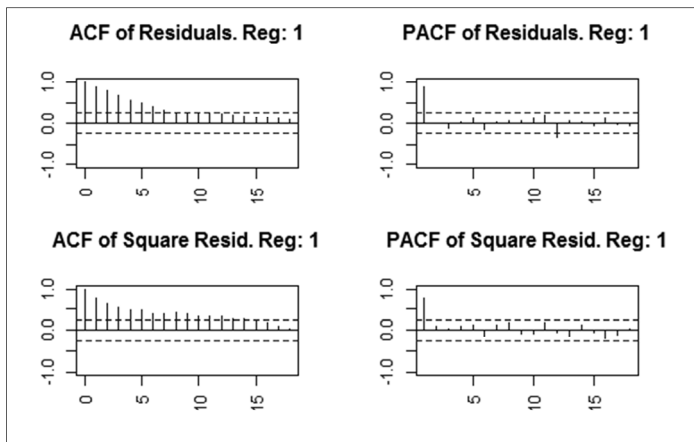


Figure 3 Autocorrelation and partial correlation in residuals of model represented by equation 4 (regime of recession)

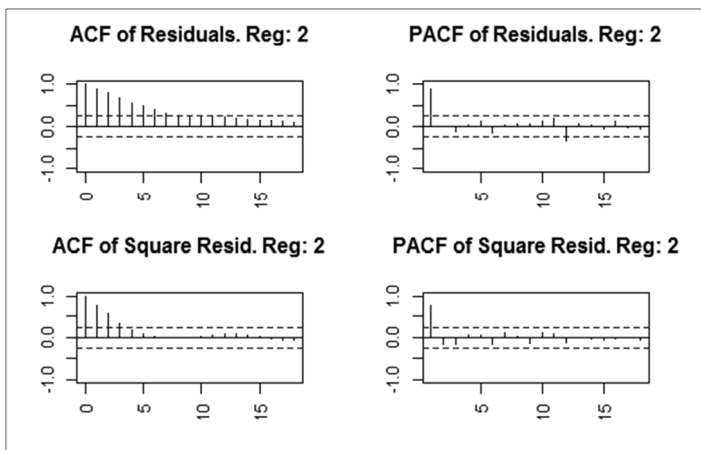


Figure 4 Autocorrelation and partial correlation in residuals of model represented by equation 4 (regime of expansion)

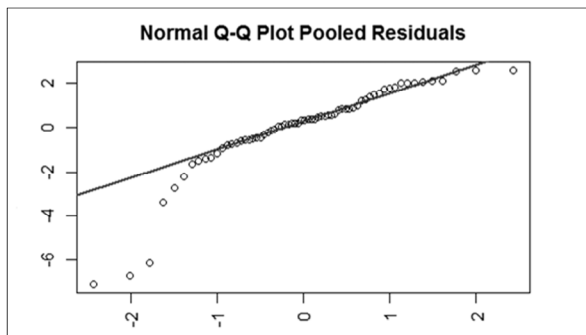


Figure 5 Normal Q-Q for the MS-AR(1) model

Table 6

Autocorrelation and Partial Correlation for the MS-AR(1) model

Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob*	
. .	. .	1	-0.029	-0.029	0.0566	
. *	. *	2	0.096	0.096	0.7001	0.403
. .	. .	3	-0.024	-0.019	0.7396	0.691
. *	. *	4	-0.139	-0.151	2.1276	0.546
. *	. *	5	0.107	0.108	2.9652	0.564
. *	. .	6	-0.080	-0.049	3.4364	0.633
. .	. *	7	-0.044	-0.079	3.5802	0.733
. *	. *	8	-0.120	-0.128	4.6846	0.698
. *	. *	9	-0.142	-0.114	6.2624	0.618
. *	** .	10	-0.199	-0.232	9.3930	0.402
. **	. **	11	0.308	0.346	17.038	0.074
. *	. *	12	-0.069	-0.075	17.430	0.096
. .	. .	13	0.061	-0.039	17.744	0.124
. .	. .	14	0.024	0.011	17.794	0.165
. *	. *	15	-0.183	-0.111	20.701	0.110
. *	. .	16	0.179	0.039	23.557	0.073
. .	. .	17	-0.058	0.006	23.861	0.093
. *	. .	18	0.111	0.030	24.993	0.095
. .	. .	19	0.069	0.065	25.439	0.113
. .	. .	20	-0.043	0.053	25.619	0.141
. .	. .	21	-0.029	0.012	25.699	0.176
. *	. .	22	0.097	0.028	26.655	0.183
. .	. .	23	-0.053	-0.043	26.943	0.213
. .	. *	24	-0.041	-0.110	27.120	0.251
. *	. *	25	-0.092	-0.125	28.049	0.258
** .	. *	26	-0.295	-0.169	37.791	0.048
. .	. .	27	0.071	0.009	38.368	0.056
. *	. *	28	-0.204	-0.115	43.277	0.025

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**STRUKTURNE PROMJENE U REALNIM STOPAMA
RASTA HRVATSKOG BDP-a*****Sažetak***

Markovljev model promjene režima bilježi nagle promjene u promatranom nizu uz pomoć egzogene varijable koja je neopaziva i slijedi stohastički proces. U radu se Markovljev model promjene režima primjenjuje na tromjesečnim stopama rasta realnog BDP-a u Hrvatskoj za razdoblje od 2000:1 do 2016:2 kako bi se analizirale promjene u očekivanim vrijednostima realnih stopa rasta. Rezultati istraživanja pokazuju da stope rasta realnog BDP-a u Hrvatskoj ovise o režimima. Markovljev model promjene s dva režima uočava pomake stopa rasta spomenutog BDP-a u. U skladu s rezultatima prethodnih istraživanja, rezultati istraživanja pokazuju tromost Hrvatskog gospodarstva i dugotrajnu recesiju.

Ključne riječi : Markovljev model, režimi, BDP, Hrvatska

JEL klasifikacija: C13, C32

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MAKROEKONOMSKI EFEKTI FISKALNE KONSOLIDACIJE U POSTTRANZICIJSKIM ZEMLJAMA EUROPSKE UNIJE

UDK / UDC: 336.1/.5

JEL klasifikacija / JEL classification: E62, H62, P24

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Sažetak

Fiskalna konsolidacija ili fiskalna prilagodba pojmovi su kojima se u makroekonomiji označava proces usklađivanja javnih prihoda i javnih rashoda, putem smanjenja rashoda i/ili povećanja prihoda. Istraživanja koja proučavaju makroekonomske i fiskalne efekte konsolidacije u razvijenim zemljama nisu česta niti imaju dugu povijest, dok su isti efekti u posttranzicijskim zemljama potpuno neistraženi. Ovaj rad mali je korak u pravcu rasvjetljavanja te veze. U radu se promatraju makroekonomske i fiskalne varijable prije, za vrijeme i nakon razdoblja konsolidacije te su identificirane promjene tih varijabli nastale za vrijeme i nakon konsolidacije. Rezultati istraživanja ne idu u prilog tezi o ekspanzivnom djelovanju fiskalne konsolidacije. Stoga, deskriptivna analiza upućuje na zaključak da, osim manjih korekcija deviznog tečaja i smanjenja troškova rada, fiskalna konsolidacija u postranzicijskim zemljama nema uspjeha u ostvarenju makroekonomskih ciljeva, kao što su ekonomski rast i smanjenje nezaposlenosti.

Ključne riječi: fiskalna konsolidacija, posttranzicijske zemlje, ekonomski rast.

1. UVOD

Cilj fiskalne konsolidacije je smanjenje proračunskog deficita te uravnoteživanje državnog proračuna u svakoj fiskalnoj godini. Fiskalna prilagodba blisko je povezana s tzv. *austerity* politikom koju bi najtočnije bilo prevesti kao mjere štednje ili politika rezova, tj. smanjivanje rashodne strane

državnog proračuna. Iako, napomenimo odmah kako u tradicionalnim modelima egzogenog (Solow, 1956) ili endogenog (Lucas, 1988) rasta pojam štednja može imati sasvim drukčije značenje. Mjere štednje odnose se na smanjenje javnih proračuna kako bi se potakao rast. *Austerity* politika je „jedan oblik dobrovoljne deflacije prema kojoj se u ekonomiji smanjuju plaće, cijene i proračunska potrošnja kako bi se smanjio deficit i javni dug te povećala konkurentnost gospodarstva“ (Blyth, 2013). U ovom radu istražiti ćemo kakve je makroekonomske posljedice fiskalna konsolidacija izazvala u posttranzicijskim zemljama i koliko su čvrsti dokazi na kojima se temelji pretpostavka o ekspanzivnom djelovanju fiskalne konsolidacije, prema kojoj je ekonomski rast praćen smanjenjem rashoda i/ili povećanjem prihoda.

Nakon teorijskog okvira, slijedi pregled empirijskih istraživanja o fiskalnoj konsolidaciji. Ključan dio rada je statistička analiza učinaka konsolidacije na izabrane fiskalne i makroekonomske varijable u posttranzicijskim zemljama¹. Rad završava zaključkom u kojem se navode ograničenja, kao i preporuke za buduća istraživanja.

2. TEORIJSKI OKVIR ZA PROUČAVANJE UČINAKA FISKALNE KONSOLIDACIJE

Teorijski dokazi za ekspanzivno djelovanje fiskalne konsolidacije odnose se na dva kanala utjecaja: kanal bogatstva (uloga očekivanja) te kanal povjerenja (utjecaj na kamatnu stopu).

Pristup prema kojemu smanjenje proračunske potrošnje povećava privatnu potrošnju nije novi u neoklasičnim modelima rasta. Smanjenje javnih rashoda koje se percipira kao trajno, prouzrokovat će efekt bogatstva. Naime, s obzirom na smanjene rashode, tržišni akteri očekuju da će i porezi u budućnosti biti niži, što povećava bogatstvo privatnog sektora (Alesina i Perotti, 1997). Prema tome, fiskalna konsolidacija koja se postiže trajnim smanjenjem javne potrošnje povećava privatnu potrošnju, uz određene uvjete.

Prvi takav uvjet predstavlja razina javnog duga na početku razdoblja konsolidacije, u odnosu prema trogodišnjem razdoblju prije konsolidacije. Što je veći porast javnog duga u razdoblju prije konsolidacije, veća je i vjerojatnost uspjeha fiskalne prilagodbe (Alesina i Ardagna, 1998). Drugim riječima, kumulativna promjena javnog duga u trogodišnjem razdoblju, prije uspješne konsolidacije, veća je od promjene u neuspješnoj konsolidaciji. Uspješne fiskalne prilagodbe poduzimaju se kada je udio javnog duga u BDP-u relativno visok, što bi značilo da su efekti fiskalne politike veći u situaciji kada postoji značajnija fiskalna neravnoteža. Objašnjenje o tome što podrazumijeva razdoblje

¹ Latvija, Litva, Estonija, Poljska, Češka, Slovačka, Mađarska, Slovenija, Hrvatska, Rumunjska i Bugarska.

konsolidacije, kao i definicije uspješne/neuspješne fiskalne konsolidacije, dio su četvrtog dijela rada.

Pretpostavimo sada da postoje rigidnosti najamnina na tržištu radne snage. U tom slučaju, povećanje proračunske potrošnje ima dva efekta (Alesina i Ardagna, 2012). Prvi efekt označava porast zaposlenosti, a time i dohotka i potrošnje, dok drugi efekt označava smanjenje bogatstva privatnog sektora, koje se događa zbog porasta poreza diskontiranog na sadašnju vrijednost. Ukoliko na tržištu postoji veliki udio kreditno-ograničenih subjekata, prvi efekt će prevagnuti. Ukoliko su sadašnja vrijednost poreza i razina duga visoki, prevagnut će drugi efekt. Ovakav jednostavan model nudi objašnjenje za pozitivnu korelaciju između šoka javne potrošnje i promjene u privatnoj potrošnji u situaciji kada razina duga nije visoka, i negativnu korelaciju kada je prisutan problem previsokog javnog duga.

Kao i proračunska potrošnja, povećanje poreza također ima dva različita utjecaja na privatnu potrošnju. Porast poreza smanjuje raspoloživi dohodak, a time i potrošnju kreditno-ograničenih subjekata. Međutim, ukoliko su javni rashodi nepromijenjeni, sadašnji porast implicira smanjenje oporezivanja u budućnosti. Ukoliko se inicijalno očekivano kretanje poreza može opisati kao rastuće, to će utjecati na smanjenje distorzija u oporezivanju. Kada je razina javnog duga visoka i ukoliko su prisutne inicijalne porezne distorzije, koristi od poreznog izgladivanja su značajne i drugi efekt prevladava. Na niskim razinama duga, prevladat će prvi efekt (Alesina i Ardagna, 2012). Stoga je u tzv. normalnim okolnostima prisutna negativna korelacija između oporezivanja i promjene u privatnoj potrošnji, dok je u situaciji kada postoji značajnija fiskalna neravnoteža korelacija pozitivna.

Drugi kanal preko kojeg se može pratiti utjecaj fiskalne konsolidacije odnosi se na premiju rizika. Naime, visoko zadužene zemlje plaćaju premiju rizika kada posuđuju novac u inozemstvu. Zato, promjena fiskalne politike može imati bitne efekte na kamatnu stopu s obzirom na mogućnost da se smanje rizici, a time i premija. Djelovanje premije rizika može se objasniti postojanjem tzv. višestrukih ravnoteža (Alesina, 2010). Naime, određenu ravnotežu može karakterizirati visoki budžetski deficit koji preko visokih kamata javnog duga otežava postizanje fiskalne održivosti. U tom primjeru, visoka premija rizika je opravdana. U drugom primjeru, niža premija rizika omogućuje nižu kamatnu stopu i lakše postizanje budžetske ravnoteže. Zbog toga, smanjenje budžetskog deficita može pridonijeti promjeni stanja ekonomije od suboptimalne ravnoteže s visokom premijom rizika k optimalnoj ravnoteži s niskim rizikom i kamatnom stopom. Tako da kanal povjerenja može stimulirati sve one komponente agregatne potražnje koje su osjetljive na promjenu kamatne stope, pogotovo investicije.

I u ovom primjeru važna je inicijalna razina javnog duga. Istraživanja pokazuju (Alesina, 1992) kako je premija rizika nelinearna funkcija javnog duga, što znači da ne postoji kod umjerene razine, ali se javlja kod većeg omjera duga i

BDP-a. Dodatno, smanjenje premija rizika više smanjuje proračunski deficit kada je inicijalna razina duga veća.

3. PREGLED EMPIRIJSKIH ISTRAŽIVANJA

Postojeća literatura o fiskalnoj konsolidaciji obuhvaća različite determinante koje utječu na efekte konsolidacije, od ekonomskih (stanje javnih financija, poslovni ciklus) do političkih faktora (intenzitet konsolidacije, političke posljedice). Pregled koji ovdje iznosimo pruža uvid u najrelevantnije aspekte fiskalne konsolidacije, od strukture preko razdoblja u kojem se konsolidacija provodi do makroekonomskih posljedica koje izaziva.

Istraživanja koja se bave utjecajem fiskalnih prilagodbi na makroekonomske determinante nemaju dugu povijest. Počevši od ranih devedesetih, nekoliko je autora zaključilo da su smanjenja proračunskih deficita u europskim zemljama rezultirala većim stopama rasta, što je suprotno standardnoj keynezijanskoj teoriji (Giavazzi i Pagano, 1990.; Alesina i Ardagna, 1998.).

Empirijske studije koje proučavaju efekte fiskalne konsolidacije na ekonomski rast značajno se razlikuju prema rezultatima istraživanja. Alesina i Ardagna (1998.) istražujući razdoblja fiskalne konsolidacije za sve zemlje OECD-a u razdoblju od 1960. Do 1994. dolaze do zaključka kako je smanjenje potrošnje puno učinkovitije za ekonomski rast od povećanja poreza. Njihovi rezultati pokazuju kako je više razdoblja u kojima su smanjenja državne potrošnje praćena ekonomskom ekspanzijom nego recesijom. Do sličnih rezultata na uzorku koji obuhvaća još duže razdoblje isti autori dolaze i 2012. godine (Alesina i Ardagna, 2012). S druge strane, Guajardo i drugi (2011.) pronalaze dokaze prema kojima su fiskalne konsolidacije praćene kontrakcijom ekonomske aktivnosti. Pad potrošnje i investicija u privatnom sektoru praćen je blagim porastom izvoza uslijed pada vrijednosti domaće valute. Međunarodni monetarni fond također naglašava kako su konsolidacije praćene negativnim stopama ekonomskog rasta u kratkom roku, a eventualnom ekspanzijom u dugom roku (MMF, 2010.). Što se tiče posttranzicijskih zemalja, Ghosh i drugi (2009.) ističu kako ne postoji puno dokaza koji govore u prilog tezi da fiskalna konsolidacija vodi oporavku u vrijeme krize. Za zemlje suočene značajnim financijskim ograničenjima glavno je pronaći odgovor na pitanje kako najbolje iskoristiti ograničene mogućnosti fiskalne intervencije.

Fiskalne konsolidacije koje se temelje na rashodovnoj strani proračuna učinkovitije su od onih koje se oslanjaju na prihodovnu stranu (Maroto i Mulas Granados, 2007). Konsolidacije koje se temelje na prihodovnoj strani proračuna mogu biti uspješne ukoliko je početni udio poreznih prihoda u BDP-u relativno nizak i ako se porast događa postepeno (Tsibouris i dr., 2006). Smanjenje rashoda najčešće je povezano s reformama koje povećavaju učinkovitost pružanja javnih usluga, dok se povećanja poreza percipiraju kao izostanak strukturnih reformi (Kumar i dr., 2007). Mjere koje su usmjerene prema ograničavanju dugoročne

potrošnje šalju signal financijskim tržištima o održivosti javne potrošnje (Cottarelli i Vinals, 2009).

Kada su u pitanju inicijalni ekonomski uvjeti za provođenje konsolidacije, rezultati istraživanja se također razlikuju. Dok jedna grupa autora tvrdi da su fiskalne prilagodbe uspješnije ukoliko se odvijaju za vrijeme ili neposredno nakon razdoblja recesije (Drazen i Grilli, 1993), drugi smatraju kako je pravo vrijeme za konsolidaciju razdoblje ekspanzije (Von Hagen i Strauch, 2001). Uspješne fiskalne konsolidacije mnogo je teže provesti unutar Europske monetarne unije s obzirom da zemlje ne mogu devalvirati devizni tečaj kako bi potakle izvoz. Lambertini i Tavares (2005.) pokazuju kako utjecaj deviznog tečaja (nominalnog i realnog) na uspješnost konsolidacije nije signifikantan.

Fiskalna konsolidacija usko je povezana s djelovanjem fiskalnog multiplikatora. Kabashi (2017.) na uzorku tranzicijskih zemalja EU otkriva da ekspanzivni fiskalni šokovi imaju pozitivan, ali relativno nizak utjecaj na *output*. Autor procjenjuje snagu fiskalnog multiplikatora na 1,2, u godini šoka i u sljedećoj godini, dok su u ostalom razdoblju multiplikatori niži. Pritom su efekti fiskalne politike bitno ovisni o strukturnim karakteristikama zemalja: fiskalni multiplikatori su veći u zemljama s niskim javnim dugom i nižom trgovinskom otvorenosti. Rezultati analize također upućuju na povećane multiplikatore u razdoblju krize u odnosu prema predkriznom razdoblju (Kabashi, 2017.). Još snažnije keynesijanske rezultate o djelovanju fiskalnih multiplikatora pronalazi Grdović Gnip (2014.) na primjeru Hrvatske. Autorica otkriva da su fiskalni multiplikatori osobito izraženi u razdoblju recesije (s vrijednostima značajno većim od 1), tj. da pozitivan šok javne potrošnje povećava *output*, privatnu potrošnju i investicije dok pozitivan porezni šok na iste varijable djeluje u suprotnom smjeru. Zbog toga se javna potrošnja na kupnju dobara i usluga u razdoblju recesije pokazala kao učinkovit instrument u poticanju ekonomske aktivnosti (Grdović Gnip, 2014.).

4. PODACI I METODOLOGIJA ISTRAŽIVANJA

Istraživanje obuhvaća posttranzicijske zemlje članice EU u razdoblju od 1995. Do 2014. Zemlje uključene u uzorak su: Latvija, Litva, Estonija, Poljska, Češka, Slovačka, Mađarska, Slovenija, Hrvatska, Rumunjska i Bugarska. Izvor podataka je europska statistička baza- Eurostat. Radi se o zemljama koje imaju sličnu ekonomsku povijest i koje su (barem formalno) dovršile prilagodbu institucija po uzoru na razvijene europske zemlje. Duljina razdoblja određena je dostupnošću, usporedivošću i kvalitetom podataka. Relativno kratke vremenske serije objektivno su ograničenje istraživanja. Međutim, naslijeđe bivšeg sustava i strukturne promjene kroz koje su posttranzicijske zemlje prolazile onemogućavaju analizu u dužemrazdoblju. Talvi i Vegh (2005.) tvrde kako su „razdoblja ekspanzije ona koja određuju prostor za diskrecijsku reakciju u razdoblju krize“. Prema tome, razdoblje koje obuhvaća godine ekspanzije nakon

kojih slijedi snažna kriza predstavlja idealne uvjete za ocjenu fiskalne konsolidacije.

Statistički se analiziraju makroekonomske i fiskalne varijable prije, za vrijeme i nakon fiskalne konsolidacije. Posebna pažnja posvetit će se pojedinim komponentama rashoda (transferi, plaće, ne-nadnična potrošnje i investicije) promatrajući njihovo ponašanje u ovisnosti o tome je li fiskalna konsolidacija uspješna/neuspješna, odnosno prati li ju razdoblje ekspanzije ili kontrakcije. S obzirom da se u istraživanju fokusiramo na makroekonomske posljedice diskrecijskih promjena fiskalne politike, razmatrat će se primarni deficit/suficit koji isključuje kamate na javni dug. Kako bi se eliminirali efekti promjene poslovnog ciklusa na stanje budžeta, koristit će se cikličkim prilagođenim proračunskim saldovima.

U istraživanju su korištene definicije Alesine i Ardagne (1998.), koje je za uzorak posttranzicijskih zemalja prilagodio Mirdala (2013.).

Definicija 1

Razdoblje fiskalne konsolidacije predstavlja onu godinu u kojoj se ciklički prilagođeni primarni proračunski saldo poboljšao za min. 1.5 % BDP-a², ili razdoblje od tri uzastopne godine u kojima se ciklički prilagođeni primarni proračunski saldo neće pogoršati za više od 0.5 % BDP-a³.

Za razliku od izvornih definicija koje u obzir uzimaju samo intenzivnije konsolidacije kao posljedicu značajnih promjena u fiskalnoj politici, prilagođene definicije uključuju dugotrajnije i slabije fiskalne prilagodbe. Razlog tome je uzorak i duljina vremenske serije. Naime, Alesina i Ardagne (2012.) koriste se vremenskim serijama od četrdeset godina na uzorku OECD zemalja, što u primjeru posttranzicijskih zemalja nije moguće. Koristeći stroži kriterij u analizi bi bilo premalo opservacija, tj. premalo razdoblja fiskalne konsolidacije.

Dodatno se razmatraju dva ishoda fiskalnih konsolidacija: njihova uspješnost u rješavanju fiskalnih neravnoteža i makroekonomske posljedice koje izazivaju. Stoga definicija 2 označava uspješne fiskalne konsolidacije dok definicija 3 određuje ekspanzivne fiskalne konsolidacije.

Dok su definicije razdoblja fiskalne konsolidacije relativno homogene među različitim empirijskim istraživanjima, uspjeh konsolidacije može se promatrati na različite načine u ovisnosti o tome kakav je utjecaj na proračunski deficit i javni dug, a posljedično i na ekonomski rast. U procjeni uspješnosti koristit će se kombinacija utjecaja na javni dug i/ili proračunski deficit. Oba kriterija imaju svoje prednosti i nedostatke. Koristeći samo proračunski deficit, ne dopušta se mogućnost uspješnosti konsolidacije ukoliko pridonese smanjenju

² Jednogodišnje konsolidacije ili tzv. *hladni tuševi* (eng. *cold shower*).

³ Višegodišnje ili *postepene konsolidacije* (eng. *gradual consolidation*).

javnog duga. S druge strane, korištenjem samo javnog duga, gubi se mogućnost smanjenja relativno visokih proračunskih deficita na niže razine, koje neće biti ocijenjeno uspješnim jer razina duga nije smanjena. Zato se pri ocjeni uspješnosti koristi obama kriterijima.

Definicija 2

Fiskalna konsolidacija je uspješna ukoliko se: a) u trogodišnjem razdoblju nakon konsolidacije ciklički prilagođeni primarni deficit u prosjeku smanjio za min. 2 % ispod svoje vrijednosti u godini konsolidacije ili b) ukoliko je tri godine nakon konsolidacije omjer javnog duga i BDP-a min. 5 % niži od omjera u godini konsolidacije.

U ovom istraživanju, za razliku od sličnih studija za zemlje EU (Barrios i dr., 2010.; Europska komisija, 2014.), posebno ćemo se usredotočiti na makroekonomske posljedice koje fiskalna konsolidacija izaziva. U tom smislu, konsolidacije se ocjenjuju prema doprinosu stopi rasta BDP-a.

Definicija 3

Fiskalna konsolidacija je ekspanzivna ukoliko je prosječna stopa rasta BDP-a u razdoblju konsolidacije i dvije godine nakon tog razdoblja veća od prosječne stope rasta na početku razdoblja fiskalne konsolidacije.

5. REZULTATI ANALIZE

Prema navedenim definicijama, identificirana su razdoblja, tj. godine fiskalne konsolidacije u posttranzicijskim zemljama EU (Prilog, tablica 1). Ukupan broj fiskalnih konsolidacija prema definiciji 1 u promatranom razdoblju je 51, od kojih se 29 odnosi na jednogodišnje konsolidacije (hladni tuševi), dok je 22 postepenih. Međutim, uspješnost jednogodišnjih konsolidacija je svega 34 % (ukupno 10), dok je taj postotak kod postepenih konsolidacija još niži i iznosi 18 % (Prilog, tablica 2). Ukoliko promatramo utjecaj na BDP, možemo zaključiti kako je 39 % konsolidacija (20) praćeno ekspanzijom ekonomske aktivnosti (prema definiciji 3), a zanimljiv podatak je da se većina ekspanzivnih (70 %) odnosi na neuspjehe konsolidacije, dok je svega 6 (30 %) uspješnih i ekspanzivnih fiskalnih konsolidacija (Prilog, tablica 3). Takvi rezultati suprotni su zaključcima koje iznose Barrios i dr. (2010.) na uzorku EU15 zemalja, dok su neznatno različiti od rezultata do kojih dolazi Mirdala (2013.).

U tablicama 4 – 5 i 6 – 7 (Prilog) prikazane su različite fiskalne i makroekonomske varijable povezane s uspješnim i neuspješnim fiskalnim konsolidacijama. Razdoblje „prije“ odnosi se na dvogodišnje razdoblje koje prethodi konsolidaciji, dok se razdoblje „poslije“ odnosi na dvogodišnje razdoblje

nakon konsolidacije. Razdoblje „tijekom“ odnosi se na godinu/e fiskalne konsolidacije.

Fiskalno stanje u razdoblju uspješnih konsolidacija lošije je nego u slučaju neuspješnih konsolidacije. Udio javnog duga u BDP-u i proračunski deficit, u razdoblju uoči konsolidacije, su obično visoki i ubrzano rastu. Drugim riječima, vjerojatnost uspješnih konsolidacija veća je u situaciji kada je stanje javnih financija pogoršano, tj. kada je zemlja u krizi. Isto vrijedi i za veličinu fiskalne prilagodbe: ciklički prilagođeni primarni proračunski deficit smanjio se za 2,65 p.p. u slučajevima uspješne konsolidacije, dok je u slučajevima neuspješne konsolidacije smanjenje iznosilo 0,91 p.p. Uspješne konsolidacije se uglavnom temelje na smanjenju rashoda dok se neuspješne konsolidacije češće oslanjaju na povećanje prihoda. Naime, kod uspješnih konsolidacija rashodi su se smanjili za 1,9 p.p., dok su kod neuspješnih rasli za 1,01 p.p. Takvi rezultati koji razlikuju uspješne/neuspješne konsolidacije u skladu su sa zaključcima do kojih dolazi Mirdala (2013.) na uzorku posttranzicijskih zemalja (izuzev Hrvatske).

Rezultati o strukturi konsolidacije (rashodovna/prihodovna strana proračuna) usporedivi su i s istraživanjem Alesine i Ardagne (1998.) koji su promatrali konsolidaciju na uzorku 20 OECD zemalja u razdoblju 1960. – 1994. Međutim, kada su u pitanju makroekonomske efekte fiskalne konsolidacije, rezultati su bitno drukčiji od spomenutog istraživanja. Naime, tijekom razdoblja konsolidacije BDP je smanjen za 4,84 p.p. u razdobljima uspješne, tj. 1,55 p.p. u razdobljima neuspješne fiskalne konsolidacije, dok je stopa nezaposlenosti porasla za 3,64, odnosno za 2,58 p.p. Dodatno, najviše prosječne stope rasta zabilježene su u razdobljima prije konsolidacije (rast od 4,17 % u uspješnim i čak 4,67 % u neuspješnim konsolidacijama), što baca sumnju na argument kako inicijalna stopa rasta određuje uspjeh fiskalne prilagodbe. Takvo stanje rezultat je pada osobne potrošnje za 5,34 p.p., odnosno investicija za 0,34 p.p. Jedini pozitivni efekti vidljivi su u blagom smanjenju jediničnih troškova rada tijekom razdoblja uspješne konsolidacije (1,22 %), kao i u slaboj deprecijaciji deviznog tečaja (0,89 %). Stopa inflacije smanjila se za 3,41 p.p., odnosno za 2,21 p.p., što je u nekim zemljama⁴ dovelo do pojave deflacije u razdoblju poslije konsolidacije. Može se uočiti i smanjenje deficita na tekućem računu platne bilance za 2,64 p.p. u slučaju uspješne, odnosno 0,67 p.p. u slučaju neuspješne konsolidacije.

Fiskalnu konsolidaciju može se promatrati na način da se razdvoje razdoblja praćena ekspanzijom ekonomske aktivnosti od razdoblja kontrakcije (Prilog, tablice 8 – 9 i 10 – 11). Rezultati istraživanja ne potvrđuju tezu o ekspanzivnom djelovanju konsolidacije do koje su došli neki drugi autori na uzorku razvijenih zemalja (Barrios i dr., 2010; Alesina i dr., 2012). Prosječan rast BDP-a u razdobljima konsolidacije koja su praćena ekspanzijom iznosi tek 0,78%, što u odnosu prema predkonsolidacijskom razdoblju predstavlja pad od 2,09 p.p., dok je nezaposlenost u istom razdoblju porasla za 1,04 p.p. Pad je još

⁴ Npr. u Hrvatskoj 2014. god.

izraženiji ukoliko se promatraju razdoblja kontrakcije i iznosi 5,28 %. Nema dokaza koji bi potvrdili tezu o tome kako su ekspanzivne konsolidacije praćene razdobljima ubrzanog rasta javnog duga, s obzirom da je taj rast veći u razdobljima kontrakcije (2,79 nasuprot 2,49). U konsolidacijama praćenim ekspanzijom ekonomske aktivnosti smanjenje ciklički prilagođenog primarnog proračunskog deficita bilo je manje (1,71 p.p.) od smanjenja deficita konsolidacijama koje prati kontrakcija (2,61 p.p.), što je rezultat suprotan zaključcima koje na uzorku četiri razvijene europske zemlje iznosi Perotti (2011.). S obzirom na pad osobne potrošnje od 2 p.p. u razdobljima ekspanzivnih konsolidacija očigledno je kako efekt bogatstva potaknut pozitivnim očekivanjima nije značajnije djelovao u posttranzicijskim zemljama.

Izneseni rezultati osjetljivi su na promjenu kriterija korištenih u definiranju fiskalne konsolidacije, pri čemu napominjemo kako bi korištenje strožih kriterija koje predlažu Alesina i Ardagna (1998.) smanjilo broj fiskalnih konsolidacija na 14, što je premalo za daljnju analizu. Vremenski horizont utjecaja konsolidacije na ciklički prilagođeni proračunski deficit i BDP relativno je kratak. Izbor dužeg razdoblja povećao bi uspješnost i ekspanzivnost. Međutim, tada bi se izgubila veza između razdoblja fiskalne prilagodbe i makroekonomskih efekata koje takva prilagodba izaziva, s obzirom da bi se efekti konsolidacije miješali s efektima koji proizlaze iz promjene ostalih ekonomskih politika.

6. ZAKLJUČAK

U posttranzicijskim zemljama potreba za fiskalnom konsolidacijom javila se puno prije ekonomske krize 2008. god., u razdoblju kada su stope rasta tih zemalja bile znatno veće od onih u starim članicama EU. To potvrđuju rezultati istraživanja prema kojima je rast BDP-a u svim konsolidacijama bio veći u razdoblju prije, nego u razdoblju tijekom konsolidacije. Uz još jednu napomenu o ograničenjima ovakve analize, istraživanje pokazuje kako osim manjih korekcija deviznog tečaja i smanjenja troškova rada, fiskalna konsolidacija nema uspjeha u ostvarenju makroekonomskih ciljeva, kao što su ekonomski rast i smanjenje nezaposlenosti.

Nekoliko je mogućih razloga tek djelomičnog uspjeha fiskalne konsolidacije u posttranzicijskim zemljama. Prvi mogući razlog je dijagnoza prema kojoj je glavni uzrok ekonomske krize u tim zemljama prevelika javna potrošnja. Naime, međunarodne usporedbe, kao i usporedbe s ostalim zemljama EU, o veličini javne potrošnje ne govore u prilog takvim tvrdnjama. Drugi mogući razlog jest neutemeljenost teorijskih postavki o tzv. ekspanzivnoj fiskalnoj kontrakciji koja je široko prihvaćena na ekonomskoj i političkoj razini u europskim i svjetskim centrima moći. Navedene postavke zanemaruju negativne kratkoročne učinke konsolidacije na agregatnu efektivnu potražnju, istovremeno precjenjujući efekte povezane s nižim kamatnim stopama, većom konkurentnosti i

pozitivne učinke na tekući račun bilance plaćanja. Treći mogući razlog neučinkovitosti fiskalne konsolidacije je univerzalnost primjene takve politike⁵. Naime, ovisnost o pređenom putu⁶ posttranzicijskih zemalja bitno je drukčija od ostalih zemalja unutar EU.

Rezultati analize moraju se promatrati s oprezom s obzirom da je, po uzoru na ranije spomenuta slična istraživanja, riječ o deskriptivnom statističkom pristupu. Naime, nije poduzeta ekonometrijska procjena učinaka fiskalne konsolidacije koja bi u obzir uzela i ostale faktore (kontrolne varijable) koji utječu na promatrane fiskalne i makroekonomske varijable. Jedan od važnih faktora je uloga političkih aktera i događaja kao što su redovni i/ili prijevremeni izbori u analiziranim zemljama. Međutim, takva analiza znatno nadilazi okvir ovoga rada. Panel analiza koja bi uzela u obzir sve spomenute faktore, prijedlog je za buduće istraživanje. Dodatno, valja uzeti u obzir kako se rezultati za pojedine zemlje (Estonija, Latvija, Litva) bitno razlikuju od prosječnih rezultata, na što upućuju standardne devijacije. Razlike proizlaze iz različitih inicijalnih fiskalnih pozicija, različitih faza poslovnog ciklusa i različite strukture rashodovne i prihodovne strane proračuna. Sve spomenuto pokazuje da je provedeno istraživanje tek korak u pravom smjeru, ali da nikako nije dostatno kako bi se donijeli čvrsti i pouzdani zaključci o različitim učincima fiskalne konsolidacije u posttranzicijskim zemljama EU.

⁵ eng. *one size fits all*

⁶ eng. *path dependence*

PRILOG: TABLICE

Tablica 1.

Razdoblja fiskalne konsolidacije u posttranzicijskim zemljama EU, 1995 – 2014-

Estonija	1996.,	1997.,	2008.,	2009.,	2012.	
Latvija	2000.,	2001.,	2011.,	2012.		
Litva	1995.,	1996.,	2005.,	2010.,	2012.	
Poljska	2005.,	2007.,	2011.			
Češka	1997.,	2004.,	2007.,	2011.,	2013.	
Slovačka	1998.,	2003.,	2007.,	2011.,	2013.	
Mađarska	1995.,	2003.,	2007.,	2008.,	2012.,	2013.
Slovenija	2002.,	2007.,	2011.,	2012.		
Hrvatska	2000.,	2005.,	2010.,	2012.,	2013.	
Rumunjska	2001.,	2010.,	2011.,	2012.		
Bugarska	2001.,	2004.,	2010.,	2011.,	2012.	

Izvor: analiza autora prema podacima Eurostat-a

Tablica 2.

Fiskalne konsolidacije prema uspjehu i trajanju

	Jednogodišnje konsolidacije	Višegodišnje konsolidacije	Σ
Uspješne konsolidacije	10	4	14
Neuspješne konsolidacije	19	18	37
Σ	29	22	51

Izvor: analiza autora prema podacima Eurostat-a

Tablica 3.

Fiskalne konsolidacije prema uspjehu i utjecaju na BDP

	Uspješne konsolidacije	Neuspješne konsolidacije	Σ
Konsolidacije praćene ekspanzijom	6	14	20
Konsolidacije praćene kontrakcijom	8	23	31
Σ	14	37	51

Izvor: analiza autora prema podacima Eurostat-a

Tablica 4.

Uspješne fiskalne konsolidacije – veličina i struktura

	prije (1)	tijekom (2)	poslije (3)	razlika (2-1)	razlika (3-1)
Javni dug	44,12 (3,11)	46,53 (3,38)	43,52 (3,18)	2,41	-0,60
Primarni deficit	5,44 (0,87)	2,79 (0,92)	3,14 (0,79)	-2,65	-2,30
Javni rashodi	42,98 (2,98)	41,08 (3,05)	41,95 (2,92)	-1,9	-1,03
Transferi	21,32 (1,56)	21,11 (1,51)	20,87 (1,49)	-0,21	-0,45
Plaće	11,56 (0,89)	10,89 (0,86)	11,21 (0,84)	-0,67	-0,35
Ne-nadnična potrošnja	4,32 (0,58)	4,11 (0,59)	4,08 (0,54)	-0,21	-0,24
Investicije	2,88 (0,31)	2,54 (0,30)	2,64 (0,28)	-0,34	-0,24
Javni prihodi	37,54 (2,87)	38,29 (2,98)	38,81 (3,01)	0,75	1,27

Napomena: Varijable su dane kao godišnji prosjeci i udjeli u BDP-u. Javni rashodi, javni prihodi i primarni deficit su ciklički prilagođeni. U zagradama ispod varijabli dane su standardne devijacije.

Izvor: izračun autora prema podacima Eurostat-a

Tablica 5.

Neuspješne fiskalne konsolidacije – veličina i struktura

	prije (1)	tijekom (2)	poslije (3)	razlika (2-1)	razlika (3-1)
Javni dug	47,21 (3,98)	49,05 (4,52)	52,23 (5,12)	1,84	5,02
Primarni deficit	3,95 (0,82)	3,04 (0,91)	3,34 (0,95)	-0,91	-0,61
Javni rashodi	42,16 (3,21)	43,17 (3,25)	45,12 (3,65)	1,01	2,96
Transferi	20,12 (1,38)	20,89 (1,50)	21,31 (1,51)	0,77	1,19
Plaće	10,21 (0,85)	10,87 (0,91)	11,57 (0,95)	0,66	1,36
Ne-nadnična potrošnja	4,36 (0,60)	4,51 (0,61)	4,68 (0,63)	0,15	0,32
Investicije	2,98 (0,32)	2,62 (0,35)	2,51 (0,38)	-0,36	-0,47
Javni prihodi	38,21 (3,01)	40,13 (3,16)	41,78 (3,22)	1,92	3,57

Napomena: Varijable su dane kao godišnji prosjeci i udjeli u BDP-u. Javni rashodi, javni prihodi i primarni deficit su ciklički prilagođeni. U zagradama ispod varijabli dane su standardne devijacije.

Izvor: izračun autora prema podacima Eurostat-a

Tablica 6.

Uspješne fiskalne konsolidacije – makroekonomski efekti

	prije (1)	tijekom (2)	poslije (3)	razlika (2-1)	razlika (3-1)
Jedinični troškovi rada	2,92 (1,41)	-1,22 (1,01)	1,14 (0,97)		
Devizni tečaj	1,76 (1,21)	-0,89 (1,11)	0,75 (1,09)		
Rast BDP-a	4,17 (1,87)	-0,67 (0,87)	1,75 (1,35)	-4,84	-2,42
Stopa nezaposlenosti	9,67 (2,87)	13,31 (2,97)	11,23 (2,94)	3,64	1,56
Osobna potrošnja	4,47 (1,52)	-0,87 (0,93)	2,87 (1,05)	-5,34	-1,60
Tekući račun bilance plaćanja (%BDP)	-8,98 (2,31)	-6,34 (2,01)	-6,51 (2,12)	2,64	2,47
Realna kamatna stopa	3,34 (0,77)	3,88 (0,80)	3,7 (0,79)	0,54	0,36
Stopa inflacije	4,97 (1,39)	1,56 (0,92)	3,08 (1,12)	-3,41	-1,89

Napomena: Jedinični troškovi rada, devizni tečaj i osobna potrošnja dani su kao godišnje stope rasta. Stopa nezaposlenosti, tekući račun bilance plaćanja i realna kamatna stopa predstavljaju godišnje prosjeke. U zagradama ispod varijabli dane su standardne devijacije.

Izvor: izračun autora prema podacima Eurostat-a

Tablica 7.

Neuspješne fiskalne konsolidacije – makroekonomski efekti

	prije (1)	tijekom (2)	poslije (3)	razlika (2-1)	razlika (3-1)
Jedinični troškovi rada	3,09 (1,62)	1,06 (0,89)	1,98 (1,09)		
Devizni tečaj	1,97 (1,25)	1,08 (1,02)	0,67 (0,52)		
Rast BDP-a	4,67 (1,76)	2,12 (1,69)	3,14 (1,78)	-1,55	-1,53
Stopa nezaposlenosti	8,76 (2,79)	11,34 (2,92)	10,08 (2,84)	2,58	1,32
Osobna potrošnja	4,95 (1,65)	2,98 (1,11)	3,87 (1,24)	-1,97	-1,08
Tekući račun bilance plaćanja (%BDP)	-7,12 (2,04)	-6,45 (1,92)	-6,67 (1,95)	0,67	0,45
Realna kamatna stopa	3,89 (0,80)	4,02 (0,82)	3,91 (0,79)	0,13	0,02
Stopa inflacije	6,08 (1,67)	3,87 (1,11)	4,32 (1,27)	-2,21	-1,76

Napomena: Jedinični troškovi rada, devizni tečaj i osobna potrošnja dani su kao godišnje stope rasta. Stopa nezaposlenosti, tekući račun bilance plaćanja i realna kamatna stopa predstavljaju godišnje prosjeke. U zagradama ispod varijabli dane su standardne devijacije.

Izvor: izračun autora prema podacima Eurostat-a

Tablica 8.

Fiskalne konsolidacije praćene ekspanzijom ekonomske aktivnosti – veličina i struktura

	prije (1)	tijekom (2)	poslije (3)	razlika (2-1)	razlika (3-1)
Javni dug	41,23 (2,92)	43,72 (3,13)	43,56 (3,21)	2,49	2,33
Primarni deficit	5,05 (1,31)	3,34 (1,09)	3,96 (1,20)	-1,71	-1,09
Javni rashodi	40,02 (3,97)	39,25 (3,81)	41,12 (4,02)	-0,77	1,10
Transferi	19,86 (1,93)	19,16 (1,82)	19,56 (2,01)	-0,70	-0,30
Plaće	10,34 (1,09)	11,09 (1,18)	11,96 (1,23)	0,75	1,62
Ne-nadnična potrošnja	3,87 (0,79)	3,05 (0,70)	3,45 (0,74)	-0,82	-0,42
Investicije	3,03 (0,45)	3,18 (0,41)	3,25 (0,43)	0,15	0,22
Javni prihodi	34,97 (3,65)	35,91 (3,89)	37,16 (3,93)	0,94	2,19

Napomena: Varijable su dane kao godišnji prosjeci i udjeli u BDP-u. Javni rashodi, javni prihodi i primarni deficit su ciklički prilagođeni. U zagradama ispod varijabli dane su standardne devijacije.

Izvor: izračun autora prema podacima Eurostat-a

Tablica 9.

Fiskalne konsolidacije praćene kontrakcijom ekonomske aktivnosti – veličina i struktura

	prije (1)	tijekom (2)	poslije (3)	razlika (2-1)	razlika (3-1)
Javni dug	45,52 (3,89)	48,31 (4,31)	51,07 (4,45)	2,79	5,55
Primarni deficit	4,53 (1,23)	1,92 (0,89)	2,76 (1,10)	-2,61	-1,77
Javni rashodi	42,34 (4,31)	43,04 (4,42)	44,08 (4,47)	0,7	1,74
Transferi	21,12 (2,09)	21,97 (1,86)	22,65 (2,14)	0,85	1,53
Plaće	12,09 (1,25)	11,51 (1,02)	11,87 (1,21)	-0,58	-0,22
Ne-nadnična potrošnja	5,06 (0,91)	6,21 (0,79)	5,98 (0,81)	1,15	0,92
Investicije	3,95 (0,52)	3,02 (0,45)	2,93 (0,50)	-0,93	-1,02
Javni prihodi	37,81 (3,91)	41,12 (4,08)	41,32 (4,12)	3,31	3,51

Napomena: Varijable su dane kao godišnji prosjeci i udjeli u BDP-u. Javni rashodi, javni prihodi i primarni deficit su ciklički prilagođeni. U zagradama ispod varijabli dane su standardne devijacije.

Izvor: izračun autora prema podacima Eurostat-a

Tablica 10.

Fiskalne konsolidacije praćene ekspanzijom ekonomske aktivnosti –
makroekonomski efekti

	prije (1)	tijekom (2)	poslije (3)	razlika (2-1)	razlika (3-1)
Jedinični troškovi rada	3,08 (1,52)	-0,82 (1,32)	1,05 (1,36)		
Devizni tečaj	1,52 (1,09)	-0,65 (1,02)	0,95 (1,08)		
Rast BDP-a	2,87 (1,41)	0,78 (1,27)	3,12 (1,44)	-2,09	0,25
Stopa nezaposlenosti	11,77 (3,12)	12,81 (3,05)	12,93 (3,17)	1,04	1,16
Osobna potrošnja	2,56 (1,09)	0,56 (0,98)	2,77 (1,16)	-2,00	0,21
Tekući račun bilance plaćanja (%BDP)	-7,32 (2,12)	-6,67 (2,01)	-6,15 (2,34)	0,65	1,17
Realna kamatna stopa	3,52 (0,67)	3,97 (0,77)	3,08 (0,61)	0,45	-0,44
Stopa inflacije	4,23 (1,21)	2,54 (1,03)	3,12 (1,12)		

Napomena: Jedinični troškovi rada, devizni tečaj i osobna potrošnjadani su kao godišnje stope rasta. Stopa nezaposlenosti, tekući račun bilance plaćanja i realna kamatna stopa predstavljaju godišnje prosjeke. U zagradama ispod varijabli dane su standardne devijacije.

Izvor: izračun autora prema podacima Eurostat-a

Tablica 11.

Fiskalne konsolidacije praćene kontrakcijom ekonomske aktivnosti –
makroekonomski efekti

	prije (1)	tijekom (2)	poslije (3)	razlika (2-1)	razlika (3-1)
Jedinični troškovi rada	2,43 (1,45)	-0,32 (1,24)	0,89 (1,30)		
Devizni tečaj	2,32 (1,14)	1,22 (1,07)	1,03 (1,01)		
Rast BDP-a	3,75 (1,56)	-1,53 (1,32)	2,76 (1,41)	-5,28	-0,99
Stopa nezaposlenosti	9,65 (2,91)	12,76 (3,05)	12,98 (3,09)	3,11	3,33
Osobna potrošnja	4,33 (1,12)	2,63 (1,02)	3,53 (1,09)	-1,7	-0,8
Tekući račun bilance plaćanja (%BDP)	-8,43 (2,41)	-7,76 (2,11)	-7,97 (2,28)	0,67	0,46
Realna kamatna stopa	3,02 (0,57)	3,34 (0,69)	3,1 (0,64)	0,32	0,08
Stopa inflacije	5,34 (1,41)	3,97 (1,35)	4,67 (1,38)		

Napomena: Jedinični troškovi rada, devizni tečaj i osobna potrošnjadani su kao godišnje stope rasta. Stopa nezaposlenosti, tekući račun bilance plaćanja i realna kamatna stopa predstavljaju godišnje prosjeke. U zagradama ispod varijabli dane su standardne devijacije.

Izvor: izračun autora prema podacima Eurostat-a

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MACROECONOMIC EFFECTS OF FISCAL CONSOLIDATION IN EU POST-TRANSITION COUNTRIES

Abstract

Fiscal consolidation or fiscal adjustment are macroeconomic terms that indicate the process of harmonization of public revenue and public expenditure by reducing expenditures and / or increasing revenues. Studies that examine the macroeconomic and fiscal effects of consolidation in developed countries are rare and of rather recent date, while the same effects in the post-transition countries are completely uninvestigated. This paper tries to shed some light on this relationship. The paper studies the macroeconomic and fiscal variables before, during and after the period of consolidation and identifies changes to these variables having occurred during and after consolidation. The research results do not support the expansionary fiscal consolidation hypothesis. Therefore, descriptive analysis suggests that apart from minor corrections of the exchange rate and reduced labour costs, fiscal consolidation in the post-transition countries was not successful in achieving macroeconomic goals such as economic growth and reduced unemployment.

Keywords: fiscal consolidation, post-transition countries, economic growth

JEL classification: E62, H62, P24

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COMPARATIVE ANALYSIS OF CONVENTIONAL AND ISLAMIC BANKING: IMPORTANCE OF MARKET REGULATION¹

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Abstract

Unlike conventional banks, whose main goal is maximizing profit based on loans, Islamic banks comply with the Islamic law (Shariah), which strictly prohibits the use of interest. Because of this is precise characteristic of Islamic banks, many were skeptical when the first Islamic banks were established, considering that interest-free banking can't survive. Despite this skepticism, Islamic banks are one of the fastest growing financial industries. Interest-free banking doesn't mean banking without profit, but a more stable and secure ethical alternative, because instead of interest, Islamic banks receive fees and commissions for their services, participate in a profit(loss)-sharing with their clients and they are protected with contracts. The purpose of this paper is to identify and analyze the similarities and differences

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between conventional and Islamic banks and draw conclusions about the stability and efficiency of conventional and Islamic banks before, during and after the crisis. In obtaining these results, special attention was given to the phenomenon of the banking sector regulation, highlighting the advantages of regulation over Adam Smith's "invisible hand" as one of the key reasons for the last economic crisis. From the example of conventional and Islamic banks, it becomes clear that any regulation policy needs to be carefully adapted to the specific conditions of individual industries, and that the same basic principles and uniform legal solutions for all market participants will not achieve desired results, as pointed out by the Nobel laureate, Jean Tirole.

Keywords: *Conventional vs Islamic banks, financial crisis, regulations, efficiency, stability.*

1. INTRODUCTION

Banks whose primary goal is to maximize profits represent the most significant financial institutions in most countries. Unlike this fact which refers to conventional banks (hereafter CBs), Islamic banks (hereafter IBs) are trying to be socially responsible while operating in accordance with religious principles, prohibiting the use of interest and following the model of profit and loss sharing with their clients. Despite its relatively short history compared to CBs, IBs and Islamic finance in general represent one of the fastest growing financial industries.

The financial crisis of 2007-2008 had a global impact on banking institutions; therefore this research focuses on the effect of the financial crisis on CBs and IBs' financial stability and efficiency, with a special emphasis on the importance of regulation in the banking sector, which is also described by Jean Tirole, an economist and a Nobel Prize winner. It is becoming clear that bank regulatory measures should be in alliance with banking principles conditioned by economic, institutional and cultural environment.

Considering the differences in business operations between CBs and IBs, as well as the difference in the approach to regulation between the stated banks, which exist only due to the principles according to which they operate, *the focus of this research paper* is on the differences in the operations of these banks as well as on the impact of these differences on the stability and efficiency of CBs and IBs. In this regard, *the objective of the paper* is to analyze CBs and IBs' characteristics, explore the differences and similarities in their business, provide an overview of empirical studies on the stability and efficiency of these banks prior to, during and after the last financial crisis, and finally, to draw conclusions about the impact of CBs and IBs' specific characteristics of business on the stability and efficiency of these banks.

2. HISTORICAL DEVELOPMENT OF BANKING

Further in the paper, the development of conventional and Islamic banking is described. Even though in its early forms conventional banking is over 5000 years

older than Islamic, analyzing their intense development, it is noticeable that conventional banking has a kind of historical advantage of about 500 years.

2.1. Development of Conventional Banks

The first precursors of banks can be traced back to ancient times (the Middle East, Greece, Rome), with the emergence of exchange of goods in the areas rich in natural resources. In the period from 3400 to 3200 BC in the Middle East, the appearance of banks was related to religious beliefs, thus the temples were bank founders. After Hammurabi's Code on the Banks from 2500 BC, the banking changes from a religious to a commercial activity, it is taken out of the temples and the real banking industry begins. Still, the banks as we know them develop only with the emergence of money. The first beginnings of banking similar to modern conventional banking were seen in Italy, in the region of Lombardy, while Casa di San Giorgio in Genoa is considered the first bank and was established in 1407.

Interestingly, following the development of banks in Italy in the 15th century, Benedikt Kotruljević from Dubrovnik, in his book "On Trade and the Perfect Merchant" from 1458 (published in Venice in 1573), besides trading, merchants, market, monetary and commercial ethics, writes about banking instruments, credit loans and interest rates (Cerović, et al., 2012, p. 37). In his book, Kotruljević describes bankers as merchants rather than moneylenders, because according to him, loans were considered support for which commission was paid, not interest, and if there is no interest, there is no usury (Perišin, 1996, p. 102).

The development of banking through history was largely influenced by the growing human needs in the fields of production and trade. The increasing concentration of capital in production and trade resulted in an increasing concentration of capital in banking. Various economic and political conditions led to new processes in banking as we know it today, so the period between the 19th century and the 1st World War is characterized by the process of concentration of banks. The period between the 1st and the 2nd World War is characterized by bank specialization, whereas the development of modern banking is seen through the process of globalization. According to Nikolić and Pečarić (2007, p. 198), this globalization process initiated de-specialization of banking operations whose goal is to create a bank as a universal financial institution which offers all services. The de-specialization process is a precondition for their survival in the globalized financial market and a way to fight off stiff competition from non-bank institutions.

2.2. Development of Islamic Banks

The establishment of the first interest-free bank in Egypt in 1963 is considered the official beginning of Islamic banking (Ahmad, 2014, p. 158; Hadžić, 2005, p. 18). In 1974, the Organization of Islamic Countries (OIC) founded an IB called Islamic Development Bank (IDB), whose goal was to promote economic development in Muslim countries and providing the funds for the development in

accordance with the rules of Sharia². By the end of 1970s, several banking systems were founded in the Muslim world; first private commercial bank in Dubai in 1975, in Sudan (Faisal Islamic Bank of Sudan) in 1977 and in Bahrain (Bahrain Islamic bank) in 1979 (Institute of Islamic Banking and Insurance, The Islamic Banker).

In the early stages of growth of the Islamic financial market in the 1980s, IBs were faced with the lack of quality investment opportunities, which enabled CBs from the West to become mediators in utilizing the funds of IBs. Therefore, Western banks helped IBs to direct the funds in business and trade-related activities, by agreeing that a merchant buys goods on behalf of an IB and sells them at an interest rate margin. Western banks noticed the significance of Islamic financial markets and started to offer Islamic financial products through so called *Islamic windows*³, attracting the clients directly, without IBs' mediation.

Today the world counts over 300 IBs in more than 70 countries, and except in Muslim countries they can be found in the following parts of the world: Australia, the Bahamas, Denmark, France, Ireland, Luxembourg, Germany, the USA, Switzerland, the UK, as well as Albania and Bosnia and Herzegovina, the only Southeast Europe countries in which there are banks that operate on Islamic financial principles (Hadžić, 2005, p. 25).

It should be noted that in Muslim countries today there are dual banking systems, i. e. the systems that comprise of both CB and IB. The example of the first country with a dual banking system is the United Arab Emirates, where the bank was established in Dubai in 1973 (Dubai Islamic Bank), that resembled the conventional commercial bank in the way it operated, but without paying and receiving interests (El Massah and Al-Sayed, 2015, p. 69).

3. BASIC CHARACTERISTICS, SIMILARITIES AND DIFFERENCES BETWEEN ISLAMIC AND CONVENTIONAL BANKING SYSTEM

The origins of Islam and its prophet Muhammad laid a foundation for the Islamic financial system. It is built on religious principles and laws (*Sharia*) which imply that trade is allowed by Allah, who prohibits usury and the existence of interests (*riba*) as a safe, predetermined and fixed income. Therefore, Islamic banking is based on an agreement between the bank and its clients about profit and loss sharing.

² Islamic religious law

³ *Islamic windows* are not independent financial institutions, but specialized departments within conventional financial institutions, offering their clients the products that comply with Islamic Sharia Law. Due to the growing demand for Sharia-compliant products and the fear of losing clients, non-western CBs started to offer Islamic windows as well.

In Islamic banking, money represents potential capital until it is invested and united with human work through business activities of production, trade and services based on moral, ethical and religious principles (Čočić, 2012, p. 215).

According to Hadžić (2005, p. 51), Islamic ideology defines (criticizes) lending of the money at an interest rate as a way for the rich (those who have the capital) to make profit without giving anything in return for the income (interest) they receive. This Islamic approach to interest resembles the approach of ancient philosophers (Aristotle) and classical economists (Adam Smith)⁴. Islamic teachings indicate that interest discourages people from production and mutual exchange of manufactured goods. If the interest is forbidden, it is considered that individuals borrow to each other with pleasure and thus do good deeds not only to others, but to themselves as well. According to Islam, the interest slows down the process of investment, and consequently, economic and overall social development. In Islamic banking, the risk is shared between the bank and the capital user. The bank is directly interested in the success of a client and participates actively in managing a future company. With such a utilization of funds, it can generate greater profits than from interest income; nevertheless, risk exposure is higher.

Imam and Kpodar (2010, p. 4) argue that, along with the prohibition of interest (*riba*), operations of an IB should abide by other restrictions of Islamic law as well:

- the prohibition of activities that generate asymmetric information, hence encouraging excessive uncertainty, i. e. financial uncertainty (*gharar*),
- the prohibition of speculative activities (*maysir*),
- the prohibition of activities that negatively impact the society (*haram*).

Considering those religious principles by which IBs operate, western analysts were skeptical about the establishment of first IBs, as they believed the absence of interest in the banking system would disable bank operations, arguing that interest-free banking implies (Iqbal and Mirakhor, 2009, p. 16):

- unlimited demand for available funds and the lack of supply,
- the lack of savings,
- unrealized investments and growth,
- the failure of monetary policy, because no instrument of liquidity management could exist without a fixed, predetermined interest rate, and

⁴In addition to the prohibition of interest, financial justice is considered the central concept of Islamic banking, which Subbarao (2009) associates with liberal views of Adam Smith, who fought against state control, trade monopoly and advocated a free market (Hasan and Dridi, 2010, p. 7-8). As Smith sees it, in order to maximize profit, an entrepreneur invests their capital where they realize the highest production and thus becomes driven by “an invisible hand”. Furthermore, he considers the wealth is not just the invested money, but also useful work which creates value. This can be compared to IBs that invest (lend) their capital with a goal of maximizing profit and share both profit and risk with the debtor, and since there is no interest, they comply with the principles of ethical business (lending to individuals without interest rates results in collective well-being).

- one-way “escape” of capital.

Based on the above, the question is how Islamic financial system and IBs can perform banking operations like CBs, and what services (financial arrangements) they offer to their clients. Despite the interest-free principle, IBs have the right to charge a fee and a commission for the work done. Furthermore, they protect their business on the basis of clearly defined contracts that will be explained below.

As Antić illustrates (2008, p. 64), the forms of financial arrangements in the Islamic financial system, on which business relations are based, can be divided into:

- *Mudarabah* (agent arrangement) – a contractual agreement between at least two parties in which one contracting party is a financier of the other party – the entrepreneur, where the profits are shared according to pre-agreed terms, while the losses are borne by the financier of the project.
- *Musharakah* (joint venture) – a contractual agreement where two or more parties, that want to become partners in a business endeavor, contribute financial resources and thus gain the right of profit sharing in any ratio agreed, while losses are shared in proportion to respective contribution to capital.
- *Murabaha* (cost plus financing) – a purchase from a financier on a deferred payment basis; the bank purchases goods for the client and gives it to their use, binding them to repay the purchase cost plus an agreed profit margin in more instalments.
- *Qard Hassan* (benevolent loans) – crediting without contractual fees.
- *Ijara, Ijara wa-Iqtina* (lease arrangements) – correspond to operational and financial leasing in conventional financial systems.
- *Istisna'* (concession agreement) – a model suitable for long-term financing of the acquisition of capital goods.

Among the aforementioned financial arrangements, *Mudarabah* and *Musharakah* represent the two fundamental forms upon which Islamic finance is based, which makes them the most common in Islamic banking.

The main difference between CBs and IBs can be seen in risk sharing and the prohibition of interest. Those are the basic characteristics of Islamic banking, while conventional banks, with the use of interest and various instruments to insure loan repayments, protect themselves against the risk of capital investments. In this way, CBs entirely transfer the risk to the debtor, thus becoming uninterested in the client's business success. Clients' deposits in IBs are considered safer because, since only successful investments bring them profit, IBs will not invest into uncertain projects. Therefore, IBs are investment-oriented (most products carry this feature) and concerned for the client's success (as banks share the same “destiny” with clients). In addition, IBs are considered socially more responsible than CBs (they do not finance the industry of alcohol, tobacco, prostitution, pornography, gamble, military) and religiously-bound (within the limits of their power, they help clients who are in trouble against their will).

On the other hand, IBs(Bosna Bank International) offer its customers different products and services such as those inCBs:

- the use of interest-free credit cards, for which a person pays a one-time fee (which includes the costs of the bank),
- fixed-term savings for which clients do not receive interest, but a certain income as a joint venture of a bank and a client (*halal*⁵income),
- an overdraft on a current account for which a client does not pay interest, but a fixed commission predetermined by the bank.

With regard to the abovementioned, one can conclude that in Islamic banking, commissions and various fees for bank services are allowed, as they are not considered the interest, which is forbidden by Islam. This answers the most common questions about the making of the profit and IBs' survival given the lack of interest, because interest-free banking is not banking without profit, but a stable and secure ethical alternative. Moreover, IBs are protected with clearly defined agreements signed with their clients, so if they finance the purchase of an apartment for a client, IB becomes a partner; i. e. it requires a minimum share in the property, protecting themselves against client's non-payment. It should be pointed out that IBs' products are not necessarily cheaper than CBs' regardless of the lack of interest, because in such cases banks are protected by contacts, fees and commissions paid by the clients.

4. CONVENTIONAL AND ISLAMIC BANKS BEFORE, DURING AND AFTER THE FINANCIAL CRISIS

Following, the paper brings an overview of CBs and IBs' operations from the perspective of their financial stability and efficiency. Then, in the context of the analysis of market power in the banking sector, it explains the relationship between the regulation and the financial crisis in the banking sector, and considers the impact of regulation on CBs and IBs' operations.

4.1. Operations of Conventional and Islamic Banks

Today, when there are numerous financing resources, which limits the competition between banks, Islamic banking is one of the fastest growing industries in the world. In the report by Ernst &Young (2012) on the competitiveness of Islamic banking in the world, the assets of IB in 2011 were estimated at \$1.3 trillion and it recorded growth despite the financial crisis. During this period, in the Islamic countries, IBs recorded 50% faster growth than CBs. According to data from 2014, Abedifar et al. (2015, p. 2) state that the assets of Islamic finance are estimated at \$2 trillion, 80% of which belongs to IBs (or *Islamic windows*). In the period from 2009 to 2013, IBs' assets grew at a rate of 17.6%, and by 2018 the expected growth rates 19.7% (The Economist, 2014).

⁵ Clean, allowed by Islam

Although the data refer to 31st December 2015 and are expressed in €, and thus are not fully comparable to those referring to IBs, it is interesting to add that the assets of the largest (conventional) European bank (HSBC Holdings, UK) are estimated at €2,18 trillion, the assets of the TOP 10 European banks at €15,06 trillion, while the assets of the TOP 50 European banks are worth as much as €29,99 trillion. Out of the 50 largest banks, as many as 7 are from Germany, while 6 are from France, Spain and the UK respectively (HSBC, 2016).

4.1.1. Financial Stability of Conventional and Islamic Banks

As many authors agree, defining financial stability is not easy (Gadanecz and Jayram, 2009, p. 365), taking into account the complex nature of financial systems and the existence of complex connections between different sectors. No clear consensus exists on how to define financial stability, how to assess it or what policy measures to apply for its realization (Kakes et al., 2004, p. 4). Lai (2002, p. 1) defines financial stability as the ability of a financial system to resist a crisis for a given shock to the system. Houben et al. (2004, p. 11) and Schinasi (2004, p. 8, 10) see financial stability as the ability of a financial system to facilitate an efficient allocation of economic resources and the effectiveness of economic processes, such as wealth accumulation, economic growth, and ultimately social prosperity, to manage financial risks and to perform these functions, even when the system is affected by external shocks. In order to protect the financial system and ensure financial stability, Lai argues (2002) that it is necessary to remove the sources of instability (sources of risk and vulnerability) by reducing likelihood of financial crisis and to mitigate the costs of the crisis when they occur, and that all relevant parties (financial institutions and authorities) should be introduced with risks. According to the European Central Bank (ECB), the first line of defense against financial crisis consists of banks, insurance companies and other financial institutions. It is their duty to remain liquid and solvent, to check the creditworthiness of borrowers and in that way manage the risks they undertake. The second line of defense is made of measures taken by public authorities to mitigate the financial crisis. This leads to the conclusion that bank stability is a segment of financial stability, and given the significance of banks as financial institutions, the concept of banking stability is often identified with financial stability. Münir et al. (2008, p. 10) point out that banking stability is the most important segment of financial stability. Schwartz (1987) claims that financial stability cannot be achieved without banking stability, and also that financial crisis occurs when banking stability is threatened. Furthermore, Barth et al. (2001, p. 3) state that a stable banking system is an important component of a stable financial system. With the identification of the concepts of financial and banking stability in definitions, the notions of financial and banking crisis are often used, since the stability implies the absence of a crisis.

There are many empirical studies that compared the stability of CBs and IBs, some of which are presented in the Table 1 below.

Table 1.

An overview of empirical studies on the stability of conventional and Islamic banks

	Sample	Author	Methodology	Research results
Before the crisis	20 out of 57 countries of OIC 1993-2004	Čihák and Hesse (2010)	Ordinary least squares (OLS) regression	- small IBs are more stable than small CBs - large CBs are more stable than large IBs
Before and during the crisis	141 countries 1995-2007	Beck et al. (2013)	OLS regression	- at the beginning of the crisis, IBs have better-quality assets ⁶ and a higher capitalization rate ⁷ than CBs
	20 countries 1995-2010	Pappas et al. (2014)	Duration model, hazard rates	- IBs have lower business risk
	24 countries of OIC 1999-2009	Abedifar et al. (2013)	Regression – random effect	- before the crisis small IBs are more stable than small CBs - during the crisis large CBs are more stable than large IBs
	17 IBs and 21 CBs Malaysia 2005-2010	Rahim and Zakaria (2013)	Panel data	-during the crisis IBs are more stable than CBs
During the crisis	8 countries 2007-2009	Hasan and Dridi (2010)	OLS regression	- in the period of 2008-2009 IBs achieved twice higher credit growth and asset growth compared to CBs - in 2009 IBs suffer a more significant profitability decline
	Pakistan 2008-2009	Farooq and Zaheer (2015)	OLS regression	- CBs are more liable to panic reactions of depositors (withdrawal of bank deposits) - IBs' lending is less susceptible to change of deposits (withdrawal of bank deposits)
During and after the crisis	11 CBs and 5 IBs The United Arab Emirates 2008-2014	El Massah and Al-Sayed (2015)	Financial ratio analysis (FRA)	- CBs are more solvent, liquid and profitable and less risky than IBs

Source: Authors' design

Based on the overview of empirical studies on the stability of CBs and IBs, it can be noticed that the results differ due to the time and place of observation, the sample size, etc. Several authors (Čihák and Hesse, 2010; Abedifar et al., 2013) differentiate between small and large banks, and conclude that before and during the crisis, small IBs were more stable than small CBs,

⁶The quality of bank assets is estimated according to the indicators of the institution's total assets, the share in total assets, institution profit and capital adequacy ratio

⁷Capitalization or capital adequacy is a measure which represents the ratio of the regulatory capital to the risk-weighted assets of the bank

while the opposite is true for big banks. They argue that small IBs have a significantly lower risk of insolvency than large IBs. Beck et al. (2013) point out that at the beginning of the crisis, IBs had better-quality assets and a higher capitalization rate (compared to CBs), which increased their ability to absorb possible losses due to bad loans, which further implies greater security for depositors and lower business risks. Greater stability of IBs before and during the crisis is confirmed by Pappas et al. (2014) and Rahim and Zakaria (2013), who claim that the factors affecting the stability of IBs and CBs are similar, except for the diversification of income, which is exclusively a function of stability of CBs. Therefore, during the crisis when a bank income was subject to change, IBs proved to be more stable than CBs. Hasan and Dridi (2010) and Farooq and Zaheer (2015) confirm higher confidence in IBs during the crisis, stating that the factors of IBs' business model helped in limiting the adverse impact of the crisis on the profitability of IBs in 2008, whereas the weakness in risk management practice of some IBs led to the decline in profitability in 2009. They emphasize the twice higher credit growth and asset growth of IBs during the crisis, which contributed to the financial stability of these banks. Furthermore, they stress out that rating agencies favor IBs, considering them less prone to business risks than CBs.

Unlike the stated opinion, El Massah and Al-Sayed (2015), analyzing mostly the period before the crisis, give advantage to CBs regarding solvency, liquidity and profitability. The following assertions support their opinion:

- CBs are basically large and strong (as opposed to IBs, which are generally smaller), and coped with the crisis more easily,
- their tradition in banking business gives them an advantage of more than 500 years over IBs,
- CBs are able to impose their products through *Islamic windows*, getting the Western culture interested and closer to the East,
- unlike IBs, which share their clients' "destiny" and thus carried greater burden during the last crisis, CBs were protected of the same with all available mechanisms and instruments.

4.1.2. Efficiency of Conventional and Islamic Banks

The literature differentiates between the two fundamental concepts of efficiency, *technical* and *price efficiency*. Farrell (1957) defines *technical (production)* efficiency, essentially, as the ratio between the results (outcomes, outputs) and investments (invested resources, inputs), and describes it as the ability of a company to obtain maximum outputs from available inputs, or in other words, the ability of a company to obtain given (desired) outputs with minimum inputs. On the other hand, he defines *price efficiency (cost, allocative or Pareto efficiency)* as the ability of a company to engage different inputs in their optimal ratio (combination) regarding their price and production technology.

According to this author, the perfect efficiency is achieved if both technical and price efficiency are achieved, and it is called *thetotal (economic) efficiency*.

Taking into account the specific features of IBs, numerous studies attempted to measure the efficiency of IBs, compare it to CBs and estimate efficiency before, during and after the crisis.

An overview of the results of selected scientific researches is shown in Table 2.

Table 2.

An overview of scientific studies on the efficiency of conventional and Islamic banks

	Sample	Author	Methodology	Research results
Before the crisis	44 IBs and 37 CBs 21 out of 57 countries of OIC 1990-2005	Bader et al. (2008)	Data envelopment analysis (DEA)	- no significant difference in cost, profit and revenue efficiency between CBs and IBs -IBs are more efficient in spending resources than in making profit
	21 countries of OIC 1990-2005	Mohamed et al. (2008)	Stochastic Frontier Analysis (SFA)	- no significant difference in cost and profit efficiency between CBs and IBs
	82 banks: commercial, investment, IBs, etc. Bahrain, Egypt, Jordan, Saudi Arabia 1992-2000	Al-Jarrah and Molyneux (2005)	SFA	- IBs achieve higher cost and profit efficiency than CBs and investment banks
	43 IBs 21 Islamic countries 1995-2001	Hasan (2006)	DEA Malmquist total factor productivity	- IBs are less efficient than CBs
	Malaysia 1996-2002	Abdul-Majid et al. (2011)	SFA	- IBs and <i>Islamic windows</i> are less cost-efficient than CBs
	18 IBs 1997-2000	Yudistira (2003)	DEA	- the crisis of 1998-1999 caused lowering of efficiency of IBs
Before and during the crisis	6 Arab countries 2004-2007	Johnes et al. (2009)	DEA Malmquist productivity ratio analysis	- IBs are less efficient than CBs
	18 countries with mostly Muslim population 2004-2009	Johnes et al. (2014)	DEA, metafrontier Two stage approach examining determinants of efficiency	- IBs are less efficient than CBs
	62 IBs 16 countries of MENA (Middle East and North Africa) 2004-2010	Mghaieth and Khanchel (2015)	SFA	- IBs are more efficient in profit generating than in cost control

	47 IBs 2006-2009	Said (2012)	DEA	- IBs' efficiency is growing in 2006-2008, and is falling in 2009 - small and medium-sized IBs are more efficient than large IBs - during the crisis IBs outside the Middle East are more efficient than those in the Middle East
	IBs in the countries of MENA 2006-2009	Said (2013)	DEA	- credit and operational risk are negatively correlated to IBs' efficiency - liquidity risk insignificantly correlates with IB's efficiency
During the crisis	15 countries 2007-2009	Rashwan (2010)	Multivariate analysis of variance (MANOVA)	- before the crisis IBs are more efficient and profitable than CBs - during the crisis CBs are more profitable and efficient than IBs

Source: Authors' design

In synthesizing the empirical results of the previous studies on CBs and IBs' efficiency, a wide variety of opinions is noticeable. While some (Bader et al., 2008; Mohamed et al., 2008) consider that there is no significant difference between the efficiency of CBs and IBs, others think that IBs are more efficient than CBs (Al-Jarrah and Molyneux, 2005), whereas the third suggest that CBs are more efficient than IBs (Hasan, 2006; Abdul-Majid et al., 2011; Yudistira, 2003). However, a closer analysis shows certain regularities. Looking at the period before the crises (smaller ones and the big one), it appears to be no considerable difference between CBs and IBs or slightly higher efficiency is noticeable in IBs' operations. But approaching the period of the crisis, the efficiency of IBs is getting lower compared to CBs. Additionally, there is a certain consensus among the authors who observed the banks at the time of the crisis, and generally, proved the impact of the crisis on bank efficiency.

Since 2004, all analyzed authors point out to greater efficiency of CBs over IBs, with the exception of two authors (Said, 2012; Rashwan, 2010), who give a certain advantage to IBs' efficiency, but again, only in the period before the great financial crisis. Mghaieth and Khanchel (2015) present an interesting finding about the possible source of IBs' problems (2004-2010), and that is that IBs are more efficient in generating profit than in controlling costs. Furthermore, Said (2013) draws special attention to credit and operational risk, which is negatively correlated to the efficiency of IBs, underlining their inexperience in risk management as one of the reasons for their poor efficiency, which is particularly evident during the crisis. In contrast, Bader et al. (2008) suggest that IBs (1990-2005) are more efficient in spending resources than in generating

profit, which is a well-grounded opinion. Namely, IBs share losses with their clients and promote partnership and fair risk distribution among bank stakeholders.

4.2. Analysis of Market Power in the Banking Sector

Taking into account different obstacles for banks entering the banking market, the number of participants and inhomogeneity of the goods, the market structure prevailing in the banking system is not perfect competition, but certainly imperfect competition and the nearest type of differentiated oligopoly (Cota, 2002, p. 115).

4.2.1. Regulation and the Financial Crisis in the Banking Sector: the Opinion of a Nobel Prize winner

The United States of America (USA) have the longest history of regulation and supervision of banking operations in the world, introducing the regulation before the foundation of American Central Bank and the Federal Reserve System (FED) in 1913, with the Federal Act of Financial Supervision (1863) and the National Bank Act (1864). The development of regulation continues in the USA with the outbreak of the Great Depression (1929-1933), after which the Federal Deposit Insurance Corporation (FDIC) was established (Miletić, 2008, p. 45). As a response to the financial crisis then, a regulatory agreement was introduced, known as the Glass-Steagall Act, which separated investment and traditional banking. It was in force until 1999, when it was repealed, starting the period of deregulation of the financial system, which lasted until the first half of the 2000s (Vujčić, 2013).

This period of deregulation (self-regulation), which essentially turned out to be a failure, can be related to the liberal theory of Adam Smith, who opposed state intervention and advocated the regulator known as the “invisible hand”. That financial liberalization had an influence on the occurrence of the crisis in the past can be seen in the research: Demirgüç-Kunt and Detragiache (1997) conducted in 65 countries in the 80s and 90s of the 20th century, where financial liberalization significantly increased the probability of banking crisis; as well as in the research by Kaminsky and Reinhart (1999), where financial liberalization preceded the banking crisis in 70% of the observed critical episodes.

It is considered that the banking and economic crisis, that first broke out in the USA in 2007 and spread to Europe in 2008, is among others, caused by insufficient regulation, which was scientifically proven by Jean Tirole, a French economist and the 2014 Nobel Prize winner for his analysis of market power and regulation. His research had a major role in investigating competitiveness and analyzing the ways to regulate the business of large companies. Tirole emphasized the importance of regulation in the statement: “The branches of industry like credit cards or Internet browsing are similar. They show a natural

tendency towards becoming a monopoly, which in itself is not bad as long as there is a possibility for more dynamic companies to take over the competition's place, but the regulators should make this possible" (Agency for the Protection of Competition).

Before Tirole published his first work on regulation, in the 1980s, the study of regulation was quite rare and it was mostly concerned about how the state could intervene and control prices in the two extreme market structures: monopoly and perfect competition. As opposed to this, Tirole began his research with the regulation of oligopoly and by analyzing various regulatory industries he laid a foundation for a new, deeper analysis of regulation and market power (Tirole, 2014). In the book "Balancing the Banks: Global Lessons from the Financial Crisis", the second chapter of which was written by Tirole (2010, p. 12-13), he described the financial crisis of 2007-2008 as follows:

- weakly implemented regulation, especially in the USA, but in Europe as well, allowed for the assumption of risk of business entities, which is mostly borne by taxpayers and investors
- market and ineffective regulation would not have had such an impact had the surplus liquidity not encouraged risky behavior.

Emphasizing the importance of regulation, Tirole (2010, p. 48) as its primary reason sees the protection of small depositors, policyholders and investors in pension funds. If the country risks saving financial mediators, the given situation becomes a problem of the protection of taxpayers. Another reason for the need for regulation is the protection against systemic risk or *domino effect* which in banking system implies the overflow of risk from one bank to another, which has just happened in the recent financial crisis.

Regulators should pay special attention to creating equal conditions for all market participants, so as not to violate the rules of a *free market competition*, a well-known dilemma which resulted in deregulation of the banking industry in the late 20th century (Pavlović, 2004, p. 61).

Relating the concepts of banking deregulation and the recent financial crisis, Dewatripont and Tirole (2012, p. 238) state: "The policy of ignoring macroeconomic shocks contained in the Basel I and Basel II has led to too much intervention in recession and excessive leniency in the boom period".

In any case, in response to the crisis, regulation again becomes a necessary practice in all segments of the economy, especially in the banking sector. However, while economists and legislators before Tirole applied the same basic principles of regulation to all economy branches and the same, simple legal solutions for all markets, Tirole has shown that such a practice in some conditions gives good results, while in others it does more harm than good. Therefore, the principles of regulation should be carefully applied to each branch of industry, taking into account all of its peculiarities. Thanks to Tirole, regulatory and competition protection bodies have come up with a new set of tools that can serve

as a framework for adaptation of industries with a strong market, such as the banking sector. In that regard, arises the question of whether Basel II and Basel III are universal tools of regulation in the banking sector or they need to be adapted to the specific needs and business principles of CBs and IBs.

4.2.2. The Impact of Regulation on Operations of Conventional and Islamic Banks

A stable banking system is one of the basic requirements for economic growth and development, hence the necessity for its regulation, since it helps in achieving solvency, liquidity and efficiency of the banking system.

The regulatory framework of banks is present at the international level since 1988, with the establishment of Basel I framework by Basel Committee on Banking Supervision. It is followed by Basel II in 2004, the purpose of which was to ensure financial stability by maintaining the level of risk to which each bank is exposed with capital requirements. In response to insufficient financial regulation and the resulting financial crisis, an idea was born about Basel III, which aimed at finding a solution for procyclicality of capital requirements and the quality of the capital. Among other things, it suggested that share capital be increased from 4% to 6% of risk-weighted assets, and the additional increase of capital requirements in the form of capital buffers in the amount of 2.5% in times of credit expansion as a counter-cyclical measure, and other protective layers for maintaining the same amount of the capital. The adjustment to new capital requirements will be carried out in stages for different aspects of the adjustment in the period from 2013 to 2019 (Kundid Novokmet, 2015, p. 160).

Vujčić claims (2013) that the financial crisis, the costs of which were very high, nearly 20% of GDP at the global level, including the direct cost of bank rescue and the lost GDP, showed how faulty the deregulation of the banking system has been over the past twenty years.

In this regard, the reforms of the regulatory framework are necessary, and they should:

- increase the capital of banking institutions, as higher capitalization and lower indebtedness guarantee greater stability of banks
- make big financial institutions in the system's center or systemically important institutions even more resilient, requiring from them higher capital adequacy and stricter risk control
- increase business transparency
- provide a mechanism for solving problems in systematically important big institutions, i. e. a restructuring mechanism, with a minimum risk/cost for taxpayers
- regulate other aspects of the financial system, directly and indirectly associated with banks, which are sometimes a direct substitute for

banking operations, and which have not been regulated so far or have been poorly regulated, such as shadow banking and derivative trade.

Considering the abovementioned differences in business operations between CBs and IBs, the regulatory framework of these banks should be adjusted to their business principles, conditioned by economic, institutional and cultural environment.

Alam (2013, p. 34) highlights three obstacles for the establishment of an effective legal and regulatory framework of Islamic financial institutions:

- the lack of harmonization between Sharia principles underlying Islamic finance and the legal framework;
- introduction of a just tax system, which would not punish the users of Islamic finance, because in Islamic finance transactions are related to activities of profit and loss, while in conventional finance transactions are tax-free, as these activities are defined as lending or borrowing
- application of the laws of the Western world leads to anomalies, and are often contradictory to Sharia principles.

Despite of Islamic finance being present on the global stage, Basel II and Basel III make no difference between CBs and IBs concerning the adaptation of regulatory measures to the specific characteristics of the financial system. Islamic Financial Services Board (IFSB) makes every effort to adapt Basel guidelines to Islamic business, although there is still a need for a standardized legal framework, which would regulate IBs' operations. Ahmad and Hassan (2007) point out to this problem on the example of Bangladesh, arguing that IBs need a defined regulatory and supervisory framework for their successful business in accordance with Sharia.

The studies presented below confirm the thesis that the bank regulation is necessary as it contributes to the financial security and the efficiency of banks.

In a research on banks conducted in 72 countries in the period 1999-2007, Barth et al. (2013) prove that restrictions and stricter limitations concerning bank activities are negatively related to bank's efficiency, while higher capital regulation is positively related to bank's efficiency. Furthermore, they claim that independent bodies which regulate the banks play a significant role in achieving the bank efficiency. Analyzing 70 IBs in 11 countries in the period of 2006-2010, Alam (2013) shows that regulations and stricter supervision of the banking system positively affect the technical efficiency of IBs, and similarly, tighter restrictions in the banking system lower the business risk of IBs. Chortareas et al. (2012) studied the dynamics between the key regulatory and supervisory policies and different aspects of bank efficiency on a sample of 22 EU countries over the period of 2000-2008. The results of their study show that stricter capital restrictions and official bank supervision can improve the bank's efficiency. Moreover, the regulatory policy which restricts banking activities can result in a higher level of bank inefficiency. Observing the relation between the regulation

and the efficiency of banks on a sample of 46 African countries, Triki et al. (2013) conclude that tighter restrictions can have an adverse impact on the bank's efficiency, while the availability of safety net⁸ positively affects the bank's efficiency, although it also depends on the bank's size and the degree of risk of banking operations. Small banks achieve lower efficiency in cases of increased capital requirements, and similarly, greater control and supervision of banks negatively affects efficiency of the banks with a lower level of risk assumption, regardless of the bank's size. All presented results support the thesis that the bank regulation should be adjusted to the principles of banking operations with regard to its size and the business risk, conditioned by economic, institutional and cultural environment.

5. CONCLUSION

Unlike CBs, whose goal is to maximize profit and whose basic operations are related to the granting of loans, receiving loans and interventions in the payment system, IBs' operations are based on Islamic laws, which strictly prohibit the use of interest. Due to this characteristic of Islamic banking, many were skeptical about the establishment of first Islamic banks, arguing that interest-free banking is not sustainable. Despite the skepticism, Islamic banking is one of the fastest growing financial industries at the global level. Interest-free banking does not imply banking without profit, but a stable and secure ethical business alternative.

As a result of the relatively short history of Islamic banking and different business principles in relation to CBs, their comparison and analysis of their financial stability and efficiency have been the subject of many empirical studies, including this one.

Although the results of previous empirical studies reveal certain inconsistencies when comparing the financial stability and efficiency of CBs and IBs, it is possible to identify certain trends and confirm the effect of the crisis on their financial stability and efficiency. When analyzing efficiency and financial stability in particular, before and at the time of the crisis, IBs show certain advantage over CBs. Greater stability, and even efficiency, is the result of the "purity" of their business based on commissions and fees (but not interest), aversion to risk (profit/loss sharing due to risk-sharing model), promotion of partnership (interest in business endeavors of the clients), religious principles (help and share their clients' "destiny"), social responsibility (not funding the industry of alcohol, tobacco, prostitution, etc.) and so on. On the contrary, in the period after the crisis, CBs show higher financial stability and efficiency in business. It is probably on account of their long history in business and therefore clients' higher confidence, a wider range of financial products offered to Western

⁸The safety net includes bank regulation, supervision (the lender of last resort, i.e. central bank) and a deposit insurance system.

and Eastern culture (*Islamic windows*), regulations adjusted to the specifics of the business of CBs (Basel I, II, III), etc.

The regulation of financial markets and financial institutions, banks in particular, is an important precondition for financial stability and efficiency of the sector. Moreover, reduced regulation, deregulation or self-regulation is one of the main causes of the recent global economic crisis, as confirmed by Jean Tirole, the Nobel Prize winner for his analysis of market power and market regulation. The criticism of inadequate regulation and the responsibility of it in the recent crisis is in a way a criticism of liberalism and the liberal theory of Adam Smith, who opposed state intervention and advocated a regulator known as the “invisible hand” of the market. In any case, in response to the crisis, regulation again becomes an imperative of market organization, especially in the banking sector.

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KOMPARATIVNA ANALIZA KONVENCIONALNOG I ISLAMSKOG BANKARSTVA: ZNAČAJ REGULACIJE TRŽIŠTA

Sažetak

Za razliku od konvencionalnih banaka, čiji je glavni cilj ostvariti što veći profit na kreditima, islamske banke pridržavaju se islamskog zakona (šerijata) koji strogo zabranjuje kamate. Zbog ove karakteristike islamskih banaka, mnogi su bili skeptični kad su se prve islamske banke otvorile, misleći da bankarstvo bez kamata ne može opstati. Usprkos tom skepticizmu, islamske banke su među najbrže rastućim financijskim industrijama. Bankarstvo bez kamata ne znači bankarstvo bez profita, već jednu stabilniju i sigurniju etičku alternativu, jer umjesto kamata islamske banke uzimaju naknade i komisije za svoje usluge, sudjeluju u podjeli profita/gubitka svojih klijenata i zaštićene su ugovorima. Ovaj rad nastoji identificirati i analizirati sličnosti i razlike između konvencionalnih i islamskih banaka prije, za vrijeme i nakon krize. Prilikom skupljanja podataka posebna pažnja posvećena je fenomenu regulacije bankarskog sektora, isticanju prednosti regulacije nasuprot "nevidljivoj ruci" Adama Smitha, kao jednom od ključnih razloga za posljednju ekonomsku krizu. Na primjeru konvencionalnih i islamskih banaka, postaje jasno da svaku regulacijsku politiku treba pažljivo prilagoditi specifičnim uvjetima individualnih industrija, te da isti temeljni principi i jedinstvena pravna rješenja za sve sudionike tržišta neće donijeti željene rezultate, kako je to istaknuo nobelovac Jean Tirole.

Ključne riječi: Konvencionalno vs. islamsko bankarstvo, financijska kriza, propisi, učinkovitost, stabilnost.

JEL klasifikacija: G21, G01, G38

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HOW CULTURAL VALUES AFFECT ECONOMIC GROWTH: A CRITICAL ASSESSMENT OF THE LITERATURE¹

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Abstract

Recently there has been a burgeoning empirical literature analysing how culture affects economic development. This field of research is currently developing further at the border between growth theory and institutional economics. This paper summarizes, and gives a detailed criticism of, this literature. Following the two major routes suggested by the critiques, the author proposes a possible path for further progress in the field.

Keywords: culture, social capital, trust, economic growth

1. INTRODUCTION

Although Adam Smith (1759) was the first to analyse how norms, beliefs, morality and culture affect economic development, an upsurge of interest in the role of culture has occurred only recently. Probably the most prominent contribution to the field which is not recent – besides Adam Smith's book –, is the influential work by Max Weber (1930). Weber used religiosity to express culture and argued that Protestantism played a crucial role in the development of capitalism. Following this line of research, nowadays some studies, such as Landes (2000), Sen (2002), Boettke (2001), or Greif (1994) argue that differences

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in culture matter for long-run development.² However, this theoretical-historical approach to the effects of culture on development is quite weak; the dominant branch is empirically oriented.

The quantitative analyses on the impact of culture have been made possible by the emergence of cross-cultural datasets such as (1) the World Values Survey (WVS) (Inglehart 1997), (2) the Hofstede dataset (Hofstede 1980, 2001); (3) the Schwartz Value Survey (SVS) (Schwartz 1994, 2006), and (4) the Global Leadership and Organizational Behavior Effectiveness Research Program (GLOBE) dataset (House et al. 2014). The aim of this paper is to summarize, and give a detailed criticism of, the empirical literature dealing with relationship between culture and growth³, and, on this basis, to propose a possible path for further progress in the field.

Up to the present time an extensive literature has developed which is diverse in terms of the measure of culture used in the analyses undertaken, their empirical strategies, and the samples of countries or regions they use. Due to this diversity, it is not easy to find a categorization criterion. What seems to be clear at first glance is that there is a line within this literature focusing on social capital (trust). Besides this, we will divide the literature into early and recent investigations, because these differ at least in one important respect: recent studies apply much more sophisticated econometrics.

The paper is organized as follows. In section 2 we will summarize the early literature, in section 3 the literature focusing on the growth-effect of social capital (trust), and in section 4 we will review the recently published literature. The next section will provide a structured criticism of the empirical literature on the impact of culture on economic growth. In section 6, based on this criticism, we will propose a possible path for further progress in the field.

2. THE EARLY LITERATURE

The number of papers using religiosity as a proxy for culture is relatively limited. One of the most influential papers is Barro and McCleary (2003), which examines the impact of *church attendance* and *religious beliefs* on economic growth. In their panel regression they use World Values Survey (WVS) data as well as two other reports on religion. They find that economic growth is positively related to the extent of religious beliefs, notably a belief in heaven and hell, but negatively to church attendance. To deal with the potential problem of

² “If we learn anything from the history of economic development, it is that culture makes almost all the difference. (Here Max Weber was right on.)” (Landes 2000:2).

³ Accordingly, we will not review those empirical studies in which the dependent variable in the empirical analysis is a variable different from a measure of economic performance. In this paper growth is understood in broad terms, since different authors use different measures in their empirical investigations: “Economic growth occurs whenever people take resources and rearrange them in ways that make them more valuable” (Romer 2008).

endogeneity, they also use an instrumental variables framework. McCleary and Barro (2006) basically reaffirm the same results; the only difference is that here the empirical strategy is a cross-country design.

Probably the most important early investigation is found in Hofstede (1980). The hypothesis behind the empirical analysis is that cultural differences may be the primary source for growth differences across countries. Here the dependent variable is the growth rates between 1960 and 1970, and the sample includes only high-income countries. Basically, the hypotheses are given empirical evidence: *individualism* is negatively, while *uncertainty avoidance* is positively associated with economic growth.

In Franke et al. (1991), the authors widen the above analysis in such a way that, in addition to Hofstede's cultural values, they include measures from the Chinese Values Survey (Hofstede and Bond 1988), as well. At the end of the day, the regression contains four Western and four Chinese values. On a sample of only 18 countries they regress these cultural variables on lagged growth rates for two periods, 1965-1980 and 1980-1987. The results indicate that more than half of the variance in growth rates can be explained by differences in cultural variables.

A line of the empirical literature on the effects of culture on growth has been developing within political science, relying to a large extent on Putnam (1993) and Inglehart (1990). While this literature, in general terms, also builds its empirical analyses on various economic theories, it suffers from certain shortcomings in econometrics. The best example of this type of paper is Jackman and Miller (1996). Here the concern is about the impact of the *political culture* on various macroeconomic measures. In order to proxy political culture the authors take Inglehart's (1990) six measures based on survey data. The empirical investigations explore the idea that the relationship between political culture and growth is very weak, if not in-existent, a conclusion that challenges Inglehart's (1990) findings.

One bias in Jackman and Miller (1996) may be that the sample consists only of the most advanced countries, and another that the model used in the empirical investigation is a reduced form version of the growth model; accordingly, the possibility that adequate control variables have been omitted cannot be ruled out (Swank 1996). From the viewpoint of model specification, Granato et al. (1996) can be considered an important improvement on Jackman and Miller (1996), leading to quite different results. Granato et al. (1996) constructs two measures of culture, namely, *achievement motivation* and *post-materialist values* (based on data from WVS), and includes them in a baseline endogenous growth model. The major finding is that both variables are significant predictors of economic growth, together with the traditional economic factors.

Edwards and Patterson (2009) extend the analysis of Granato et al. (1996) in several ways. First, they repeat the estimation of the same growth

regression for different periods of time and samples of countries. Their results cannot confirm those of Granato et al. (1996). Their possible answer to this inconsistent impact of culture across time and samples is that the essential meaning of culture has changed. Second, Edwards and Patterson (2009) deal with the problem of the possible endogeneity of culture, which was not the case in Granato et al. (2009). After instrumenting achievement motivation and post-materialism they find that achievement motivation is a significant explanator for long-term growth rates, but the other cultural variable is not. In sum, their results show that the links between culture and growth are not as clear as was found by Granato et al. (1996).

Besides the above paper, Swank (1996) is another study to highlight and refine the results of Granato et al. (1996). This theory-driven empirical analysis includes two new variables to express political culture, namely *Confucian statist* and *social corporatist systems*. Both are expected to matter for economic growth via two mechanisms. First of all, rent-seeking and free-riding behavior may be reduced in corporatist states, and in the case of the Confucian statist polities, there may be a direct pay-off related to industrial policies. Secondly, these two communitarian policies, through the promotion of consensus and concertation, may tend to produce political stability, which, in its turn, promotes economic growth. To test these hypotheses, Swank (1996) uses the growth model of Granato et al. (1996). First, he replicates their results for the sake of comparison, then he includes a dichotomous variable for Confucian statist and social corporatist systems. The communitarian polities model, in which he does not include Granato et al.'s (1996) two variables, proves to be superior on statistical grounds to that of Granato et al. (1996). The major finding, namely that the two communitarian polities have a positive significant impact on growth is robust to the variations in the sample composition.

3. THE SOCIAL CAPITAL (TRUST)-GROWTH LITERATURE

While early studies developed mainly outside economics, “the opening through which culture entered the economic discourse was the concept of trust” (Guiso et al 2006:29). In this literature trust is seen as a proxy for culture. The trust⁴-growth literature started with Putnam et al. (1993) which is the first study to investigate the economic effect of social capital, which “has opened a Pandora’s box of research” (Casey 2004:96) where trust is seen as the most important dimension of social capital⁵ (e.g., Fukuyama 1995). In their book Putnam et al. (1993) analyse Italian regions and argue that the critical factor in explaining

⁴ Interpersonal trust is associated with the confidence that a partner will not exploit the vulnerabilities of the other, that is, she will not behave in an opportunistic way. This is the meaning of trust as “generalized morality” (Tabellini 2008).

⁵ Putnam et al. (1993:167) defines social capital as those “features of social organization, such as trust, norms, and networks, that can improve the efficiency of society by facilitating co-ordinated actions”.

differences in the economic performance of various Italian regions can be found in regional differences in social structure. The study finds that in regions with a horizontal social structure, based on trust and shared values, social capital is higher, and economic outcomes are greater.

This work has been followed up by numerous analyses⁶, of which Knack and Keefer (1997) is the most influential. Inspired by Putnam et al. (1993) the two scholars associate social capital with interpersonal *trust* and *civic cooperation*. To measure them, they take data from the WVS.⁷ Knack and Keefer (1997) investigates the effect of social capital on economic performance in a cross-country regression on a sample of 29 developed countries. First of all, they find that both cultural variables significantly affect economic growth⁸, but more importantly, when including an interaction term of trust and GDP per capita in the regression besides trust and civic cooperation, they arrive at some very interesting results which are in line with certain related economic theories. More specifically, they provide evidence that both trust and civic cooperation are stronger in countries with higher and more equal incomes, with institutions that restrain the predatory actions of chief executives, and with better-educated and ethnically homogeneous populations. Their results are robust to the use of alternative control variables. As another line of robustness checks, Knack and Keefer (1997) regresses trust on output per worker, physical and human capital per worker and total factor productivity. Trust is found to be significantly correlated with all these variables except for total factor productivity.

An advantage of the paper by Knack and Keefer (1997) is that it tries to explore the channel through which trust can affect economic growth. Due to various data constraints, the authors can only consider two possible channels: the impact of trust on the strength of property and contractual rights, and the impact of trust on the performance of the government. The results provide evidence that trust may improve the efficiency of the government and contract enforceability. Knack and Keefer (1997) is an important paper in the field, providing strong empirical evidence for the direct and indirect effects of trust on growth.

Zak and Knack (2001), in some respects, is an extension of Knack and Keefer (1997), by confirming its main findings, but at the same time, providing new insights, as well. The hypotheses Zak and Knack (2001) tests are derived from a theoretical model regarding trust. This is a model with investors and

⁶ Another work involving Putnam, namely Helliwell and Putnam (1995) is a further contribution to the follow-up literature. The authors find the same positive relationship between social capital and economic growth in the regions of Italy, but here they do not include generalized trust in their measure of social capital.

⁷ The question used in the WVS to assess the level of *trust* is: "Generally speaking, would you say that most people can be trusted, or that you can't be too careful with dealing with people?" Trust is measured as the percentage of respondents in each country that replied "most people can be trusted". To measure *civic cooperation*, they use several questions such as whether the individual feels justified in keeping money that he or she has found, or evades taxes if he or she has the chance.

⁸ According to the results, a 10 percentage point increase in trust is associated with an increase in growth of four-fifths of a percentage point (Knack and Keefer (1997:1260).

brokers, in which the investors are subject to moral hazard by the brokers. After formulating testable hypotheses from the model, Zak and Knack (2001) run cross-country growth regressions on a sample of 42 countries to test them. As in Knack and Keefer (1997), this paper measures trust with data from the WVS (answers to the same question). The results suggest that a one standard deviation (15 percentage points) increase in trust will lead to 1 percentage point increase in growth rates (Knack and Zak 2001:307). To control for the possible endogeneity of trust in the growth regression the authors run 2SLS regressions, using the Catholic, Muslim and Christian Orthodox share of the population as instruments. Here the results are robust to the choice of the human capital variable (which was not the case in Knack and Keefer 1997). They also use an interaction term of trust and per capita GDP, which allows them to prove the existence of the low-trust poverty trap. Similarly to Knack and Keefer (1997), Zak and Knack (2001) also analyses the determinants of trust, namely formal institutions and population heterogeneity. The most interesting results come from these investigations: much of the influence of formal institutions and population heterogeneity on growth occurs through their impact on trust. So, Zak and Knack (2001) are able to identify trust as a channel, and not only a factor on its own to induce growth.

The paper by Beugelsdijk et al. (2004) explicitly and extensively analyses the robustness of the results on the relationship between trust and economic growth derived by the above-mentioned two seminal papers (Knack and Keefer 1997, and Zak and Knack 2001). They provide robustness analyses along four dimensions. First, they focus on the statistical significance of the trust variable.⁹ Second, they explore the robustness of the results on trust in terms of effect size. Thirdly, they analyse the sensitivity of results by using different proxies for the variables that are always included in a Barro-type growth regression (e.g., initial income, human capital). Fourth, they change the sample of countries.¹⁰ The results reveal that Zak and Knack (2001) are very robust along the first two dimensions, which is not the case for Knack and Keefer (1997) which is robust only to a very limitedly extent. Beugelsdijk et al. (2004) also shows that the improvement in robustness is due to the inclusion of countries with relatively low scores of trust; accordingly, as they conclude, the empirical literature on trust and growth is mainly plagued by data constraints rather than the biases resulting from omitted variables.

Whiteley (2000) examines the relationship on a cross section of 34 countries for the period between 1970 and 1992. To measure social capital, he uses an index of three indicators from the WVS. These are questions about trusting members of one's own family, trusting fellow citizens, and trusting people in general. He obtains very similar results to those of the above studies: social capital has a positive significant effect on economic growth, with a size

⁹ In these investigations they change the set of conditioning variables in the regressions.

¹⁰ They start with the 29 countries of Knack and Keefer (1997), then gradually add the 12 countries with which Zak and Knack (2001) extends the analysis.

comparable to that of human capital and convergence. The results seem to be robust after various robustness checks are carried out.

Following Putnam et al. (1993), a few studies have examined whether social capital is a prerequisite for prosperity at the sub-national level. Schneider et al. (2000) is one example. This paper analyses how political culture and social capital affects growth on a wider sample of the regions of Europe between 1980 and 1996. To measure social capital the authors take data from Eurobarometer, and not the WVS. After running standard OLS regressions they find that strong doubts are raised regarding Putnam's hypothesis: they argue that Putnam et al. (1993) overstate the effect of social capital on the growth of Italian regions; the impact of culture on economic growth is marginal, at best. Their results warn us that the relationship between social capital and growth may be conditional.

Casey (2004) is the only study dealing with British regions. The author tries to comprise the "original" meaning of social capital by constructing an index from *civic engagement*, *trust* and *associations* based not only on WVS data, but British Social Attitudes data, as well. As a measure of economic performance, he uses a composite index, too. The statistical methods applied by Casey are not very sophisticated (including only correlations): the main finding is that the Putnam social capital index is robustly correlated with the economic performance index. Even the author admits that no causality is highlighted by his analysis and no economic policy can be based upon it.

Beugelsdijk and Van Schaik (2005a) is another paper looking at regional differences in Europe in the field of social capital-development. The main components of their social capital index are *trust* and *civic engagement*, the data for both are taken from European Values Studies for 1990, and by applying factor analysis one comprehensive measure is created for social capital. In their empirical investigations they relate this measure to economic development and regional economic growth in 54 western European regions in 7 countries. As a measure of economic performance, Beugelsdijk and Van Schaik (2005a) calculate regional growth differentials by relating the regional GDP per capita to the country mean.¹¹ They come to a very similar conclusion to that drawn by many others: after controlling for initial levels of GRP per capita, social capital is positively and significantly related to regional economic growth.

With the intention of answering the question of whether the findings of Putnam et al. (1993) on Italian regions can be generalized, the two authors mentioned above refine their investigations in another paper (Beugelsdijk and Van Schaik 2005b). Instead of constructing a composite index for social capital, here they use separate measures for its two dimensions: *generalized trust* and *associational activities*. They also renew the regression analysis, by modifying the specification, but more importantly, by providing an extensive set of

¹¹ As they argue, an advantage of using relative data versus non-relative data is the direct control for national growth rates that might bias regional growth rates.

robustness checks. As for the regression specification, they include additional control variables. What they find is to some extent different from their previous results, and from Knack and Keefer's (1997): trust is not a significant determinant of regional growth, but active group membership¹² is, a result that partly confirms Putnam et al.'s (1993) hypothesis. These results seem to be very robust after running 5 different types of robustness checks.

Berggren et al. (2007) provides an extensive robustness analysis concerning the link between trust and growth, and discovers that this relationship is less robust than claimed by earlier studies. As one dimension of robustness checks, the authors look at whether the results are stable over time, by using data for the 1990s, as opposed to the time period involved in earlier studies (1970-1992). Extreme bound analysis and robust regression methods, and the combination of the two are other types of robustness checks they apply. Their basic OLS results indicate the same positive and statistically significant relationship between trust and economic growth found in previous studies. But the robustness results point to four new facts: when removing four outliers, the estimated coefficient is almost halved; statistical significance at the 5 percent level is obtained at a much lower percentage than what has been found before; when conducting extreme bound analysis without outliers, the trust coefficient is statistically significant at the 5 percent level in 10.1 percent of all regressions; the distribution of estimated trust coefficients is more widespread compared with the previously studied sample of countries. The authors conclude "even though trust may not be robustly related to growth, it could still be important to some degree – and at least as important as many other "classic" variables" (Berggren et al. 2007:271).

Akçomak and ter Weel (2009) is unique in the literature in the sense that it focuses on the indirect effects of social capital on economic growth. As a channel through which social capital induces growth rates, this paper identifies innovation. The theoretical framework is as follows: "A higher social capital stock, which is determined by historical institutions, increases the incidence of innovation. The reason for this is that investments in innovative activities are risky and capital providers want to receive commitment from researchers that their money is well spent. This is easier in an environment in which people trust each other. In turn, this increases income" (*ibid* p. 546). To test the above, Akçomak and ter Weel's (2009) empirical strategy consists of three steps. First, they establish the causal relationship between social capital and growth, second, they examine the link between social capital and innovation, and third, they apply 3SLS strategy. Throughout the empirical investigation trust is instrumented by historical institutions such as early literacy, past political institutions and universities. The data source for social capital is the European Social Surveys and the European Values Study Surveys, and for innovation it is Eurostat's regional database. Akçomak and ter Weel's (2009) results augment to a great extent those

¹² Civic engagement, or in other words, associational activity, is divided into different categories, such as active and passive group membership (Beugelsdijk and Van Schaik 2005b).

of the cross sectional studies: for 102 regions in Europe, this paper provides evidence for the fact that innovation has a strong positive impact on growth, the former being significantly affected by social capital, but social capital does not have a significant effect on growth. In other words, unlike previous studies the estimations do not suggest a direct role for social capital, but an indirect one. These results are valid and robust.

The only paper discovering a negative relationship between trust and growth is Roth (2009). The theoretical underpinning for a possible negative relationship between trust and growth is the collective action theory of Olson (1982), which emphasizes the possible negative effect of the accumulation of too many special interest groups hampering the efficient actions of the government. Roth (2009), as opposed to the above studies on the trust-growth relationship which rely on a cross sectional design, uses panel data and runs fixed-effects regressions for a 41-country sample over the period from 1980 to 2004 with a total of 129 observations. His major finding is that economic growth is negatively related to trust, which is mainly driven by certain countries that exhibit the highest negative relationship in the sample. Roth's further investigations also reveal that when excluding transition countries from the sample, the relationship becomes curvilinear, meaning that in low-trust countries an increase in trust leads to higher growth, but in high-trust countries an increase in trust leads to a decrease in growth. But, interestingly, if he analyses the relationship in a cross section of countries, the positive association of trust with growth detected by many, appears. Although Roth's (2009) results are statistically robust, and supported by Olson's (1982) theory, he warns that his results may suffer from omitted variable bias, or measurement errors or misspecification.¹³

The research question of Ahlerup et al. (2009) is also unique in the social capital-growth literature because the authors' primary interest lies in understanding whether social capital substitutes or complements formal institutions in economic growth. To derive hypotheses for the empirical analysis the authors develop a simple model of a sequential investment game between a lender and a producer in which both a formal institution (enforceability of contracts by courts) and trust is included. The model suggests that the effect of trust is nonlinear and depends on the quality of institutions. The results obtained from a standard cross-country Barro-type growth regression provide evidence that trust (measured by the usual WVS question data) and formal institutions (measured as the *quality of the government*¹⁴) substitute each other in growth: both trust and formal institutions have a positive and significant impact on growth, and their interaction term is also significant, but negative. In the

¹³ Helliwell (1996), to some extent, endorses Roth's paper (2009) by pointing to a negative relationship between trust and economic performance. As a measure of economic performance he uses productivity growth. Clearly, this is the only cross-country study that finds negative link between trust and economic performance.

¹⁴ Quality of the government is the average of ICRGs measures of corruption, law and order, bureaucracy quality.

interpretation of Ahlerup et al. (2009) this indicates that the marginal effect of social capital decreases with better institutions: trust matters the most when formal institutions are weak. On the other hand, the marginal effect of an improvement in institutions depends on the level of trust. Accordingly, the relationship between trust and institutions is mainly about substitution.

4. THE RECENT LITERATURE

Tabellini (2008, 2010) opens up a new branch in the analysis of the impact of culture on development by introducing and pioneering the use of a composite measure based on answers to four WVS questions, diverging in this way from the social capital concept. The variables he focuses on are *trust*, *respect*, *individual self-control*, and *obedience*.¹⁵

In his 2010 paper (Tabellini 2010) he shows that the aggregate variable constructed from the four introduced above significantly correlates with current development in different regions of Europe, after controlling for country fixed effects and for school enrolment in 1960. He assumes that trust, respect and individual self-control serve as rules governing and stimulating interaction between individuals, whereas obedience is thought to limit economic interaction and development by decreasing risk-taking, which is important for entrepreneurship. He also uses an instrumental variable estimation because of his suspicion that the causal effect of culture is endogenous to economic development. His finding is that the data do not reject the hypothesis that the effect of the two historical variables (past literacy and past political institutions) on regional output only operates through culture. When it comes to the question of whether the effect of culture is direct or indirect, his results suggest that the effect of culture on output operates mainly or exclusively through the functioning of government institutions, at least within Italy. A plausible interpretation of the findings of this paper is that cultural differences are so important because they bring about a different functioning of the same formal institutions, and that culture is central to the mechanism through which past institutions influence the functioning of current institutions.

The four measures suggested by Tabellini are extensively used by Williamson in several empirical studies. In her 2009 paper (Williamson 2009) she investigates the relationship between formal and informal institutions (culture) and how the interaction between the two can impact development. To measure formal institutions, she uses the political institutions of Glaeser et al. (2004) and develops an index for formal institutions by using the first principle component of four measures. In order to measure informal institutions (culture), she relies on Tabellini (2010). She develops a culture index based on the four variables described above. Then she calculates the difference between the formal and

¹⁵ As a kind of self-criticism, he acknowledges that the way in which he treats culture is largely a black box (Tabellini 2010:711). See also section 5.

informal (culture) indices with the aim of measuring the strength of formal institutions vis-à-vis the informal ones. Her results, in an important respect, are different from those of Tabellini because she identifies a dominant effect of informal institutions (culture): strong informal institutions are determinants of economic development regardless of the strength of the formal institutions.

More recently, she and her co-author (Williamson and Mathers 2011) show that culture, and the economic institutions associated with economic freedom are both independently important for economic growth, where culture is measured by the above-mentioned culture index.¹⁶ They find that when controlling for both culture and economic freedom simultaneously, the strong association between culture and growth becomes much weaker, while, overwhelmingly, economic freedom retains a positive and highly significant relationship with economic growth. According to them, this suggests that culture and economic freedom may act as substitutes. To some extent this result conflicts with that of Williamson (2009) since here culture becomes less significant in the growth regression when certain institutions are in place.

Mathers and Williamson (2011) is another paper which investigates how the interaction between culture and economic freedom affects economic prosperity. By including culture in the analysis the authors aim to provide a partial explanation for why the same institutions lead to different economic outcomes. They find that culture enhances the impact of economic freedom on growth by about 10 percentage points. Their results suggest that the same economic institutions combined with different cultures have diverse outcomes.

Voigt and Park (2008), as proxies for values and norms (culture) use the GLOBE study on culture, leadership and organization, in which different values and norms reflect firm behaviour, in particular different leadership models. Voigt and Park's (2008) hypothesis is that in the long-run there will be a close correspondence between culture (values and norms) and institutions, since those institutions which are incompatible with the prevalent values and norms are likely to disappear. They use a simultaneous equation approach and examine the influence of culture both directly and indirectly via institutions. As for the direct effect of culture, their results are rather mixed: when using the rule of law as a measure for institutions, culture does not have a significant effect beyond that of the rule of law; when using a measure of political institutions, some values have a significant effect. As for the indirect effect of culture, the results are not convincing either way. In sum, Voigt and Park (2008) find that some norms matter for economic development, but this impact greatly depends on the choice of institutional proxy.

¹⁶ Johnson and Lenartowicz (1998) is an early, but very preliminary, attempt to link culture to economic freedom, and accordingly, to economic development. The idea is that culture affects the extent to which countries are economically free. To express culture, this paper uses the data of both Hofstede and Schwartz. However, the empirical model is underspecified, the sample is very small (25 countries) and there are no robustness checks.

Gorodnichenko and Roland (2010, 2011) analyse the effect of the three main measures of culture (the WVS, the Hofstede data and the Schwartz Values Survey) on output per capita. In the 2011 paper they find that the Hofstede's *individualism index* is always significant, whereas this is not the case for most cultural variables. Among the Schwartz variables¹⁷, *embeddedness* is significant with a negative effect, and *affective autonomy*, *intellectual autonomy*, and *egalitarianism* are also jointly positively significant.

In their more detailed analysis (Gorodnichenko and Roland 2010), they assume that culture plays a key role in stimulating innovations and hence explaining long-run economic growth. They hypothesize that culture is a basic force underlying formal institutions and long-run growth. They find that there is a two-way causality between culture and institutions, thus suggesting that institutions are in part determined by culture. They show empirically a strong causal effect from culture to long-run growth and the level of innovation. Their findings are consistent with the predictions of their theory, indicating that a more individualist culture should lead to more innovation and hence greater economic development. They clearly show that culture makes an important contribution to economic development which is independent of institutions. In terms of magnitudes, culture explains income differences across countries at least as much as institutions.

Maseland's (2013) focus is on explaining how culture affects institutions, and as a by-product, per capita GDP. Relying on a literature in biological psychology, he proposes using a new instrument for culture when regressing culture on institutions. This variable is the prevalence rate of *Toxoplasma gondii*¹⁸. It has been shown that infection with this parasite has an effect on individual personality: a stronger focus on competition and personal achievement, at the expense of concerns for others, and reduced conscientiousness, and morality (Flegr et al. 1996). These changes in personality make people more opportunistic and suspicious of the behaviour of others, and reduce the level of trust in society (Maseland 2013:115). As a measure for culture Maseland (2013) uses the first principle component of four measures (power distance, individualism/collectivism and uncertainty avoidance, from Hofstede (2001), and distrust (WVS)), and for institutional quality he used the first principal component of the Worldwide Governance Indicators' sub-categories. By using the IV estimation strategy with *Toxoplasma gondii* as an instrument, his main finding is that culture exercises a significant effect both on institutions and per capita GDP. Its results are robust for a large set of control variables.

¹⁷ The Schwartz variables will be presented in detail in the next section.

¹⁸ *Toxoplasma gondii* is a parasite commonly found in the intestines of cats and other felines which can cause latent infection among humans. Prevalence rates differ across countries.

5. CRITICISM OF THE LITERATURE

The criticism vis-à-vis the empirical analysis of the impact of culture on growth is widespread, but three main debatable issues emerge in particular. First of all, the empirical studies lack of clear conceptualization and a well-developed theoretical framework. Second, the measurement of culture can be criticized on many grounds. Third, a number of difficulties can be associated with the econometrics used in the literature. In relation to the above three issues, several critical arguments are put forward, the majority of which concern the literature on trust, which is the most developed in the field, as can be seen from the above review.

On the theoretical side, some of the most prominent scholars in the field draw attention to the vague concept of culture¹⁹: according to Tabellini (2010), culture is a “black box”, which is an impediment to the further development of research in the field. The above review also shows that every time scholars refer to *culture* they simply reduce its meaning to a much narrower concept, such as *trust* or *church attendance*, and many others; and depending on which particular meaning is used, the empirical results may be different. This may suggest that culture must be regarded as a multidimensional concept (e.g., Klasing 2013, Beugelsdijk and Van Schaik 2005b, Bjornskov 2006). Here one can agree with Herrmann-Pillath (2014) who argues that the econometrics of culture simply shows that there is an impact of *something* on economic performance, but we do not know what it is exactly.

The main line of the criticism concerning the measurement is that it lacks any theoretical framework. According to Beugelsdijk (2006), the major problem regarding the culture (social capital)-growth literature is the mismatch between the theoretical foundations of culture and its empirical operationalization: the conceptualization is at the micro level, referring to micro units such as individuals (or firms), but in the empirical investigations culture is used as an aggregate macro variable, as with the growth rate or investment variables. Furthermore, Beugelsdijk (2006) thinks that “we do not measure what we think we measure” (*ibid* p. 373), i.e., the WVS trust question is a bad measure.²⁰ To provide evidence for this opinion, he shows that in the sample of Zak and Knack (2001) the WVS trust question correlates highly with the good functioning of formal institutions; accordingly, trust is just an element in a broader measure of institutions. Not only the WVS, but the Hofstede dataset is criticized, too, for measuring culture in a rather *ad hoc* or pragmatic way: Schwartz (1994, 2006) argues that Hofstede’s (2001) dimensions of culture lack

¹⁹ As Moore (1999:75) puts it: “We are trying to do empirical research on a fragile conceptual base. The concept of trust remains elusive, and useful empirical measures still evade us.”

²⁰ For instance Glaeser et al. (2000) finds that a survey question about trust predicts trustworthiness much better than it does trusting behavior. Beugelsdijk and Maseland (2011), and Miller and Mitamura (2003) point out that the WVS trust question is ambiguous: it is not clear what “generally speaking” means (see footnote 7). As a consequence, there may be doubts as to whether it really measures generalized trust among those who do not know each other.

any *a priori* theorizing about culture, and he proposes a theory-driven measure for culture (more details in the next section).

As for the econometric problems, many (e.g., Durlauf 2002, Durlauf and Fafchamps 2005, Beugelsdijk et al. 2004, Beugelsdijk 2006) illustrate the basic econometric difficulties with the culture (social capital) literature: robustness (sensitivity) and endogeneity. Both issues were to some extent discussed in the above review. For instance Beugelsdijk et al. (2004) and Berggren et al. (2007) provide robustness checks and report that the results of previous studies are less robust than claimed. When it comes to IV strategy in the empirical investigations, the list of instruments is quite wide-ranging. While instrumental variables used in the most recent studies are more convincing about their exogeneity, the instruments of earlier studies may be weak instruments (Fehr 2009) because it is quite easy to find arguments supporting their direct effect on growth.

Bearing in mind these three critical issues in the field, what suggestions could be made to ensure further progress? First of all, one needs theory-based testable hypotheses when analysing the role of culture (Guiso et al. 2006). Furthermore, since culture has several dimensions (e.g., Klasing 2013) the effects of various cultural dimensions must be analysed separately from one another to see the potentially different effects produced. That is, one needs to evaluate the impact of each particular cultural phenomenon rather than evaluating the impact of their “aggregate” (Tambovtsev 2015). To sum up, researchers in the field should move towards testing theory-based hypotheses about the impact of a particular cultural dimension or component on economic performance and highlight the mechanism of this impact.

In line with the above arguments, Manski (2000) clearly states the two possible paths for further development: (1) empirical researchers need to be much clearer on the questions they address²¹, and (2) empirical studies need to be based on better data, if possible on experiments. The first route means that we need to move from an analysis of generalities to that of specific relationships, since it will facilitate more precise and comprehensive modelling of causal mechanisms. The second route involves trying to find the kind of cultural data that is based on some *a priori* theorizing about the effects and, accordingly, captures a well-defined dimension of culture.

6. HOW SHOULD WE MAKE FURTHER PROGRESS?

The two routes emerging from the above critiques are quite clear, but the question which remains is what concrete steps could be taken. In what follows we

²¹ Durlauf and Fafchamps (2005:1689) argue in the same way: “empirical analyses need to step back from grandiose approaches to social capital and focus on the more mundane but potentially far more fruitful task of analyzing specific social components to individual behavior”.

will make suggestions regarding both routes that might help advance future research in the field.

Bearing in mind the multidimensional character of the culture as proposed by several scholars, my argument is that Boettke et al.'s (2008) theory of institutional stickiness can be a useful theoretical framework for "unbundling" culture. Similarly to the way in which these authors categorize different institutions on the basis of their degree of stickiness, we propose to distinguish various layers of culture based on their stickiness. Deeply embedded cultural values are the *core* to which other cultural layers and institutions stick. Furthermore, particular cultural layers differ in terms of the extent of their stickiness. Consequently, what I argue is that instead of dealing exclusively with the "aggregate" culture, it is worth differentiating various layers of the culture, based on their stickiness, and one has to analyse their effects separately.

We have good reasons to assume that particular cultural layers exercise different effects on economic development; accordingly, empirical investigations on particular layers will be concerned with much more specific questions than the rather "grandiose" ones which feature in the current literature. Of course, here there is no space to develop the layer model of culture; only various preliminary ideas can be discussed. First, I must emphasize that the variables used in the literature can belong to different cultural layers. The deepest layer, i.e., the *core* to which other layers are stuck, is those individual values that serve as guidelines for individuals' actions, and basically cannot change. Trust, in Tabellini's sense, belongs to another layer, since trust is not exogenous in economic growth, but rather endogenous, and depends upon individuals' circumstances, and can change if these circumstances change. As a third layer we would mention various attitudes or religiosity that can change relatively frequently, and are less sticky.

The second route proposed above is related to the measurement of culture: measurement should be based on theoretical grounds. Since, as argued above, culture is a multidimensional concept, its measurement should relate to the measurement of a particular layer. International survey-databases are hard to develop and scholars are reluctant to initiate them. So we would not argue that such databases would be needed; instead, I intend to draw the attention to an already existing database that has not (yet) been widely used by researchers. This database is the Schwartz Values Survey, which has been built since 1988 by Shalom Schwartz (Schwartz 1994, 1999, 2006), and, importantly, on theoretical foundations.

The theory behind the database has been developed in cross-cultural psychology, and centres on individual values. Based on a clear and unambiguous definition²², Schwartz sees values as the *core* of culture which are exogenous to individuals and do not change. The survey questions and the variables derived

²² Values are the rich complex of meanings, beliefs, practices, symbols, and norms that that guide people in their actions.

from them rely on *a priori* theorizing, rather than *ad hoc* examination of data. The starting point for Schwartz (1994, 1999, 2006) is that all societies confront three basic issues when forming the social relations, and the answers to these questions are inherently different in different societies. Schwartz identifies 7 values, forming an integrated system. To measure them, the database contains 56 abstract items that have reasonably equivalent meanings in each country. To sum up, the Schwartz Values Survey provides “better” data than the WVS or Hofstede, so future research should rely on it to a greater extent, especially when it comes to an analysis of the deepest cultural layer.

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KAKO KULTURNE VRIJEDNOSTI UTJEČU NA EKONOMSKI RAST: KRITIČKI PREGLED LITERATURE

Sažetak

U posljednje vrijeme svjedočimo naglom porastu znanstveno-istraživačke literature koja proučava utjecaj kulture na ekonomski razvoj. Ovo područje istraživanja nastavlja se razvijati na granici teorije rasta i institucionalne ekonomije. Ovaj rad sažima i daje detaljan kritički pregled ove literature. Slijedeći dva glavna pravca koja preporučuju kritičari, autor predlaže mogući pravac za daljnji napredak u ovom području.

Ključne riječi: kultura, društveni kapital, trust, ekonomski rast.

JEL klasifikacija: O43, Z19

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MAPPING INDOOR CAMPING AS A TOURISM PRODUCT AND ITS UPGRADE ACCORDING TO YOUTH PREFERENCES

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Abstract

Less equipped than hostels, indoor camping provides shelter - which is what primarily differentiates it from classic, open-air camping. Beyond hospitality, it can be compared somewhat to squatting, but legally regulated for tourism purposes, since visitors sleep on the floor using their own sleeping bags. Unlike other solid tourism facilities, including second homes, the property is not only in function of holidaying but also in use for other purposes: it can be a gym, a local community club etc. This temporality and thus multifunctional use of the property is what makes indoor camping a unique model of hospitality. The attitudes of young generations regarding such a tourism product were investigated with the goal of forming a marketable model. The research was carried out on an intentional sample of students. The purpose of this paper is to raise awareness of sustainability as a prerequisite for youth festivals tourism destinations dealing with peak periods of visiting and to lobby for creating an adequate legal framework that would allow this model to take hold in practice. The originality of this paper is represented by conceptual mapping of indoor camping as an

innovative tourism accommodation in the broadest sense according to purpose and time dimension.

The potential of indoor camping might benefit all three basic entities of sustainability. It has the power to put into function vacant buildings or enrich already existing ones by adding hospitality as a new role, without, however, permanently modifying their primary purpose.

Keywords: indoor camping, temporary accommodation, youth tourism, sustainability, innovation

1. INTRODUCTION

Sustainability is a must when forming tourism strategies along with the imperative of development. Many destinations hosting festivals are reaching impressive tourism results, nevertheless, permanent modification of the landscape for a few overcrowded periods is not a logical solution. Indoor camping aspires to be one of the solutions to such a problem of insufficient accommodation capacity in peak festival periods.

Indoor camping is an innovative theoretical concept introduced by the authors in 2016. It basically consists of putting vacant or already existing buildings temporarily into function of tourism. The modification for tourism purposes is minimal since guests sleep on the floor using their own sleeping bags. Due to this peculiarity it is primarily intended to cater for younger generations.

The idea came out as a result of a real need: namely, in the municipality of Barban, Croatia, during a festival, the carrying capacity of the destination is insufficient to host all participants and the closest ground suitable for camping is a bit out of reach. In such situations usually nearby destinations benefit by hosting the excess demand. However, the old school building, owned by the municipality and now a social club and modest library, is ideally centrally located, thus it might be used as a camping spot inside. That way, earnings from accommodation would remain in the destination and could be reinvested in the local community.

The main intention of this research is to check its suitability for the youth tourism segment and to further develop it. Namely, the creation of travel needs and motifs of youth travellers has impact onto their continuous demand and makes them travellers for life. Destinations with diversified tourist products affect travellers' loyalty from the youth stage of travel to family travel and tourism to "grey" tourism. Besides, innovative and distinctive forms of accommodation provide "experience plus" where both sustainable and low budget lodging facilities impact guests' satisfaction and their future perception and arrivals.

This paper completes the authors' previous research and represents its final piece of puzzle in the conceptual development of a new model of tourism accommodation as well as a product which can be easily applied in practice. Up

to now, the opinions of all interested stakeholders were collected except those from the potential customers, which will be presented in the research part. These stakeholders had positive attitudes towards indoor camping as a low cost and sustainable answer to a few overcrowded days in their municipality (Kontošić, Slivar, Floričić, 2017).

The paper consists of five parts. In the theoretical review the tourism product and indoor camping followed by youth tourism with a focus on festival and events are presented. The mapping of indoor camping as a tourism product is graphically represented in chapter four, preceded by the research conducted using an intentional sample of students. The survey results are presented in the same chapter, while the fifth part contains concluding remarks.

2. THEORETICAL REVIEW

2.1. Tourism product and indoor camping

Tourists perceive tourism products from a horizontal perspective: as the sum of several elements provided by different tourism offer providers. On the other hand, the representatives of the tourism offer realize the vertical perspective of the product, taking as a reference point, the satisfaction of the visitors and their specific needs, while focusing on the manufacture and supply (Muhcina, 2008).

From a marketing perspective, a tourism product is defined as "a set, in a certain time, of functional, interactive units, related to real or experienced physical, service, economic and psycho-social elements which ensure satisfaction of users regarding the fulfilment of their tourism needs" (Mrnjavac, in 1992.:122).

Depending on its complexity, tourism products can be graded from simple to integrated tourism products, which implies the involvement of consumers in the final creation of the product with its active participation and experience (due to the inseparability of production and consumption in tourism). All gradations of the tourist product up to the integrated kind are called partial tourism products, and these are: (Krizman Pavlovic, 2008):

- A simple tourist product - services / goods that appear in tourism consumption
- Elemental or basic tourist product - for example, hospitality services (accommodation, food, entertainment, sports, trade etc.)
- Semi-integrated tourism product – e.g. travel packages offered by tourism intermediaries. They consists of at least two services (transport, accommodation or other tourist services) that form a whole and are provided for a period longer than 24 hours or include at least one night. These services must be charged in the total price in accordance with the

directives of the contract on organized travel as defined by obligations act (NN 35/05, 41/08, 125/11).

In regard to the relationships that are formed on the supply and demand side when creating a tourism product which becomes an object of exchange on the tourism market, it is possible to differentiate the tourist products created according the principle of "DIY - do it yourself", "package" and "networking" (Bencardino and Marotta, 2004). With the DIY concept customers independently combine a variety of simple and natural tourism products into a single unit where they contact with different tourism offer providers, unlike in the other two concepts. The tourism product created as a "package" corresponds to the semi integrated tourism products, which include a high level of standardization of the products, while the concept of networking is characterized by the interaction of companies specialized in the provision of different or the same tourism products, that cooperate to ensure the delivery of tourism products of a certain standard of quality and price.

According to **the reviewed** theory, indoor camping is an elementary or basic tourism product.

From the aspect of demand, tourists evaluate and grade different destination products and services uniformly, as a sum of several elements of different offer providers. This emanates the need to collaborate with other complementary offer providers in the destination, which is one of the basis of the indoor camping concept, given that it does not have its own tourist infrastructure. For its implementation it requires the collaboration of more tourism and non-tourism providers.

It is based in a non-tourism facility, e.g. a community building or a sports hall, which can be easily converted to tourism purposes. Housekeeping services must be provided, while front office services might be organised on call (Kontošić, Slivar, Floričić, 2016). It has the potential to spread fast, as minimal construction works are required.

It "blurs the boundaries between solid accommodation and campgrounds, tourists' and residents' amenities and opens up new possibilities for sustainable tourism".(Kontošić, Slivar, Floričić, 2016). Another plus of it, is that provides tourists to experience sleeping in unconventional places e.g. in a castle, in a fortress, in a stall etc. (Kontošić, Slivar, Floričić, 2016).

The concept of indoor camping is very simple and low budget featuring the following minimal requirements:

- be located within walking distance from the event venue,
- offer front office services on call,
- offer minimally 12sqm per indoor camping place (for three persons) and +3sqm per every additional person. Accommodation units have to be adequately marked as well as the passages among them,

- offer at least one electricity connection per person per one indoor camping place,
- provide a minimal number of toilets (one basin, shower and toilette for each sex every 15 persons).

The research part will provide an upgrade of services of this basic model in order to suite best young tourists' needs.

2.3. Youth tourism – a focus on festivals and event tourism

Youth tourism is a special form of tourism which encompasses the population of persons between 16 and 35 years of age who travel several times a year, mainly in company. It includes the placement of programs which are fundamentally less expensive (transport + accommodation), but which are more eventful in the destination itself. According to the research conducted by ICC/ESOMAR CODE and ESOMAR world heritage guidelines, youth tourism makes for over 20% of the international population (1.44 times a year).

Youth tourism in many aspects affects the culture of travel, as travellers acquire a habit of travelling earlier in life. That effect influences global tourism development and increases the amount of means spent per single person during the course of their lives (the average at the world level is between 40,000 and 120,000 US dollars). Furthermore, estimates indicate that by the year 2020 the number of the youth tourism travellers will be over 300 million and that the total market value will be over \$320 billion (Richard, Wilson, 2003).

In recent years, youth tourism trends are such that they benefit the speedy growth and development. (Richard, Wilson, 2003:2,6). The youth tourism traveller classification primarily includes students under the age of 26, with a high level of education, who, although having a low income level, because they are studying, show readiness to work and save money: while travelling and also before it, in order to increase their financial solvency. Over a half of them identifies themselves as travellers, a third as "backpackers" and around a fifth of them, as tourists.

The desire to acquaint new cultures, which is accompanied by the factor of excitement and entertainment, broadening knowledge, represents the main motivational factor. Young travellers, under the age of 26, generally demonstrate a greater desire for acquaintance with new cultures and socialisation, while in older travellers, the trend is to have holidays as individualised as possible. Also, long journeys lasting several months are represented as "once in a lifetime opportunities" and young people are prepared to spend an exceptional surplus of their energy, money and time in order to realise that to the full (Richard, Wilson, 2003:2) Considering from the aspect of traffic, the dominance of rail and road transport is evident, primarily due to the price accessibility. With the strengthening of low cost airlines, the plane, as a means of transport is playing an increasingly important role. Tourist expenditure is directed towards excursions

and entertainment, dynamic activities such as theme parks, bungee jumping, mountaineering, paragliding and other adventure sports.

Considering accommodation units used by youth tourism, Richards (2003:18) analyses the ranking of accommodation structures: backpacker hostels, budget hotels, youth hostels, independent holiday homes, bed and breakfast facilities, campsites, self-catering apartments, camper vans and other structures.

The motivation of youth for staying at campsites, apart from favourable prices, also includes freedom, mobility, independence, stay in nature, involvement in various activities and already mentioned social dimension of intense socialising.

The Institute of Tourism study (Čorak, 2006:66) points that Europe is the most developed world's camping region, thus the share of young people in the use of campsite offers in Europe ranges between 5 and 7 %. The most inclined to camping are the Dutch, the Danes, the French, the Norwegians and the Germans. When talking about the emissive markets, the leading countries are Germany, France, The Netherlands, Great Britain and Italy. These five countries generate four fifths of all travels to campsites in Europe (Čorak, 2006:73). Furthermore, Countries of the European Union see youth tourism as a vital sector (Richards 2003:8). The European Commission's YOUTH Programme is active in stimulating youth and student travel through cultural and educational programmes such as SOCRATES and LEONARDO, which facilitate the mobility of more than 100,000 young people and students every year.

In the past, the tourism of youth and students was not sufficiently researched by the profession due to the fact that it was given a stigma of a low value and income, as well as due to the complexity of measurement of contributions of youth tourism. Today, however, there are an exceptionally large number of organisations, which deal with the growth and prosperity of youth and student tourism, as well as organisations and authors who study the problem area itself from a theoretical angle and from the economic positions (in the form of organised accommodation facilities for young people). Krešić and Miličević (2010) analyse the organised hostel offers, Richards (2007) and Daly (2013) study youth tourism modern trends, as well as the implementation of digital technologies, while Douglass (2013) analyses the trends of adaptation of budget hotels to the hostel segment of demand, as well as the accommodation options in privately owned facilities. The importance of organised campsites with offers adapted to the demand trends of young people should take a closer look to their needs during events of different types and sizes.

Event tourism is not usually recognised as a separate professional field; it is mostly seen as an application of, or specialty, within national tourism offices (NTOs) and destination marketing/management organisations (DMOs) (Getz, 2008:403)

However, what are the events that are growing so rapidly in recent years? A long time ago festivals and events were defined as formal periods or programmes of pleasurable activities, entertainment, or events having a festive character and publicly celebrating some concept, happening or fact (Janiskee, 1980: 98). They have been around for centuries and are part of the culture of many societies. Events are an important motivation factor in tourism and development of a tourism destination, producing a competitive advantage as compared to other holiday destinations. Lately, festivals and special events have become one of the fastest growing types of tourism attractions (Getz, 1997, Thrane, 2002). Moreover, events for a long time have been viewed as a tool for economic development, because visitors increase demand and stimulate output in the economy (Sayman et al, 2005).

In scientific literature, events can be classified into a few categories: mega events, hallmark events, special events and specific types of events (Getz, 2005). It is also possible to classify events on the basis of their “place of attachment” and the degree to which they are associated with, or institutionalised, in a particular community or destination. According to that, mega events are typically global in their orientation and require a competitive bid to ‘win’ them as a one-time event for a particular place.

Hallmark events cannot exist independently of their host community and local or regional events are by definition rooted in one place and appeal mostly to residents (Getz, 2008, Ispas, 2011). Respectively, there is a differentiation of events according to form and content: sport events, tourism industry of business travel (MICE segment of tourism: meetings, incentives, congresses and events) and festivals, claim Van der Wagen et al (2008).

Special events link young people and tourists by drawing attention to the attractions that a community has to offer and providing at the same time an enjoyable experience for local residents (Brunson, 2002).

Special event research emerged as an area of tourism management in the mid-1970s (Hede, 2007). It was during the 1980s that the study of events including youth tourism began to grow dramatically in academia (Getz, 2008). The 1990s were a landmark in the event management literature while in the 2000s the literature on events was frequent but, more importantly, it gave recognition to distinct specialisations and sustainable development.

Youth events impact on cultural exchange and experience and create networks between people and groups within communities. Some of the common goals of youth event tourism include creation of a favourable image for a destination and prolongation of the traditional tourist season. On the other side, it is recognised that youth events sometimes produce negative impact on local community in the mean of waste management, noise, etc. so the solution could be found in sustainability and in the „Zero Waste“ concept (Krstinić Nižić, Perić, 2015)

Youth tourism trends point to the fact that those customers, as a part of the Y and Z generations (Benckendorff, Moscardo, 2010) are looking for low budget accommodation with all safety and hygienic prerequisites and catering services, and all of that in the vicinity of the event venues. Given the dispersion of accommodation and catering facilities, this represents a limiting factor, as event venues can hardly meet the quantity of demand for adequate accommodation facilities. Solutions are proposed in traditional organised hostels, privately owned accommodation facilities and campsites, which represent organised permanent accommodation structures, as well as in the innovative model of temporarily organised hospitality, indoor camping.

3. RESEARCH METHODOLOGY AND RESULTS

The research was conducted in three days in September 2016 among 139 Croatian students of Juraj Dobrila University of Pula and 15 ERASMUS students coming from Spain, France, Poland and Czech Republic. The Croatian sample counted 89,9% of undergraduate students and 10,1% graduated students, while in Erasmus group, there were 53,3% of undergraduate students and 46,7% graduated students. Cumulatively 85,71% were undergraduate students and 14,3% graduate out of which, 35% of respondents were male and 64% were female.

An original questionnaire consisting of six questions was developed as the research instrument. The survey questions were regarding where they usually stay during travelling, way of travelling, usual type of accommodation used by students and questions about indoor camping and its features. Basic statistics have been used to process data in Microsoft Excel 2010.

Students mostly stays in private apartment/accommodation (47%), followed by hotels, resorts (24%), hostels (21%), on the last place are camping sites (42%). 87% of students didn't use Couch surfing and didn't travel as backpackers but they would try it, if they got the chance (56%). Students agree that indoor camping is a welcome accommodation model in a time of great events that they would use (44%), they agree with the size of the indoor camping accommodation unit: 12m² for 3 people and for each additional person 4m², which is sufficient for sleeping (39%). They consider important (agree) having wi-fi (51%), safe (31%), shared kitchen (53%), gathering room (40%). Most of them would use this type of accommodation for only 1 night (47%), 2-4 nights (45%) and more than 4 days only 0,07%. What is encouraging is that 58% students think that this type of accommodation provides new experiences for them as tourists.

Thus, this model is acceptable for youth during big events and it should be expanded by adding common/shared kitchen and wi-fi connection at least. Safety is very important for the surveyed population so adding a safe deposit box for them is not enough, some also recommend to hire a security. This model is

suitable for students and young populations. Its sustainability is enhanced by its temporariness that is in accordance with the collected answers.

4. MAPPING THE INDOOR CAMPING AS AN ACCOMMODATION MODEL

The authors suggests two classifications of tourism accommodation including marginal / hybrid products and map indoor camping accordingly.

Hybrid tourism models vary from on one continuum residential purposes to non- residential purposes on the other continuum. The overlapping circle parts form various hybrid models, whereas one is indoor camping (Figure 1.).

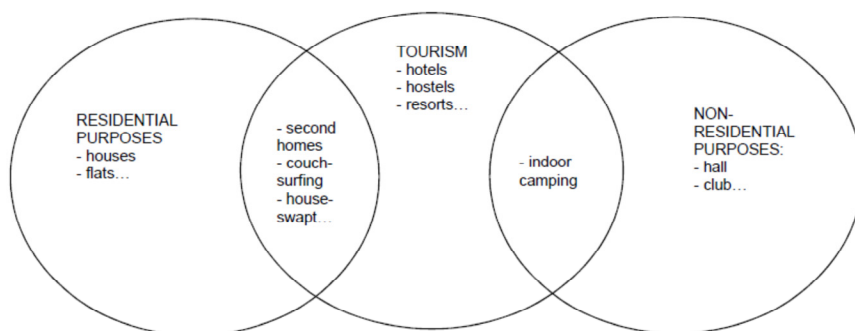


Figure 1 Tourism accommodation models in the broadest sense classified according to purpose

Source: Authors' contribution

Residential purpose solid facilities can be easily turned in function of tourism. Hybrid accommodation models crossing residential and tourism properties include: second homes, couch-surfing, house-swap, rent a spare room and similar. Indoor camping is a hybrid model used from time to time for tourism purposes although its primary purposes are non-residential. Along with indoor camping also classic, open-air camping (a tourism primarily tourism-purpose facility) can sometimes have a multifaceted role: when non-operating, they might be used for recreation of the local community (sport playgrounds, walking paths etc.).

The second classification of solid tourism accommodation including hybrid models takes in account the timeframe of use of the property for tourism purposes versus other purposes. Indoor camping is meant to be a solution that adds extra bedding in cases when a destination's capacity is insufficient; therefore

it is categorized as an asynchronous model meaning all the roles subsequently interchange. (Figure 2).

<p>PERMANENT - hotel - hostel - resort...</p>	<p>SYMULTANEOUS - couch surfing - rent a spare room...</p>	<p>ASYNCHRONOUS - indoor camping - residential house swap - second homes...</p>
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Figure 2 Solid tourism accommodation models in the broadest sense classified according to time dimension of use for tourism purposes

Source: Authors' contribution

Permanently modified properties for tourism purposes represent obviously the most complex tourism accommodation products grouping mainly classic, wide-known tourism accommodation types. Simultaneous models apply adding tourism to an already existing property purpose in a way to limit ordinary activities in case of sharing spaces / rooms or in putting in function spare rooms. Asynchronous products are those that cater for two or more different needs in a different time span.

5. CONCLUSION

The concept of indoor camping was developed as a sustainable alternative to the classical construction solution: building of new accommodation capacities or renovating and thus permanently changing the purpose of other residential or non-tourism buildings. Namely, in the case of a few overcrowded peak periods, indoor camping fits as a better solution, especially in case of youth festivals.

The main theoretical contributions of this paper are two tourism accommodation classifications:

- 1) According to the scope of use, indoor camping is categorised as a hybrid tourism and non-residential model, which exists as a fixed accommodation structure.
- 2) According to the time dimension, indoor camping is an asynchronous model meaning that the two above mentioned roles (non-residential and tourist one) do not overlap but take part in different periods.

The research of attitudes of potential consumers showed that almost half of the respondents (44%) expressed the interest in indoor camping stays. According to the survey results, the basic model of indoor camping has to be upgraded with the following amenities: kitchen (53) and Wi-Fi(51%), but a gathering room (40%) and safe deposit boxes (31%) could also be added.

Indoor camping should be supported by lobbying for creating an adequate legal framework that would allow this model to take hold in practice. (Kontošić, Slivar, Floričić, 2016)

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MAPIRANJE ZATVORENOG KAMPA KAO TURISTIČKOG PROIZVODA I NJEGOVO UNAPRJEĐIVANJE U SKLADU S PRIORITETIMA MLADIH

Sažetak

Slabije opremljen od hostela, zatvoreni kamp pruža zaklon – ono što ga prvenstveno razlikuje od klasičnog kampa na otvorenome. On nadilazi klasičnu uslugu turističkog smještaja, može se usporediti sa skvotiranjem, koje je zakonski regulirano u turističke svrhe, jer posjetitelji spavaju na podu u vlastitim vrećama za spavanje. Za razliku od drugih fiksnih turističkih objekata, nekretnina nije samo u funkciji turističkog smještaja, već se njome koristi i u druge svrhe: može biti teretana, klub za lokalno stanovništvo i slično. Ova privremenost i time multifunkcionalna upotreba nekretnine čini zatvoreni kamp jedinstvenim modelom pružanja usluge turističkog smještaja. Ispitani su stavovi mladih generacija o ovakvom turističkom proizvodu, s ciljem formiranja modela koji bi se mogao plasirati na tržište. Istraživanje je provedeno na slučajnom uzorku studenata. Svrha ovog rada je podići svijest o održivosti kao preduvjet za turističke destinacije festivala mladih koji imaju udarne dane posjeta, te lobirati za stvaranje adekvatnog zakonskog okvira koji bi omogućio primjenjivanje ovog modela u praksi. Izvornost ovog rada je u konceptualnom mapiraju zatvorenih kampova kao inovativnog turističkog smještaja u najširem smislu, ako se uzme u obzir svrha i vremenska dimenzija. Potencijal zatvorenog kampa može zadovoljiti sve tri osnovne pretpostavke održivosti. On može staviti u funkciju prazne zgrade ili obogatiti postojeće dajući im pritomnovu ulogu pružanja turističke usluge smještaja, dok istovremeno ne mijenja njihovu izvornu namjenu.

Ključne riječi: zatvoreni kamp, privremeni smještaj, turizam za mlade, održivost, inovacija.

JEL klasifikacija: L22, L83, M13

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BUSINESS ETHICS THROUGH THE PRISM OF MORAL DILEMMAS OF THE ACCOUNTING PROFESSION IN MONTENEGRO

UDK / UDC: 657:174

JEL klasifikacija / JEL classification: M41; M14

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Abstract

Having in mind that many professions in modern business conditions abound in introduction of the code of ethics, International Federation of Accountants (IFAC) has prepared the Code of Ethics for Professional Accountants. Since the collapse of big companies and inadequate reliability ratings of financial statements by major auditing companies, the issue of the quality of the financial statements, which serve as the basis for all business decisions and ultimately direct the development of each company, comes to the fore. The paper aims to show the impact of business ethics, and moral dilemmas to the level of quality of financial reporting. The work is based on the hypothesis that companies with a greater degree of commitment and business ethics have a higher level of quality of the financial statements in respect of those companies which are characterized by a lower level of business commitment. The fulfilment of the set objective of this paper requires its structuring into two parts. The first part will be an overview of the importance of the accounting profession, its ethical dimension and the role it plays in achieving the quality of financial reporting. The second part of the paper concerns practical review of the processed theoretical issues through the example

of neighbouring countries that are at the stage of EU accession or are already full members of the European family.

Keywords: *financial reporting, accounting profession, EU, ethical dimension*

1. INTRODUCTION

Modern economic conditions carry with themselves a number of challenges. One that is imposed in the business environment, which is set against the individual and the corporation regards achieving a balance between ethical behaviour and achieving satisfactory economic performances. The field of business and economics, as a field in which the moral and economic values intertwine, is marked as one of the best areas of moral testing. The foregoing is actually the best set of reasons why today almost all theorists agree that business ethics is an inevitable factor of modern, but also a successful business.

Learning about ethical and moral behaviour should be an integral part of the corporate culture of the company that will contribute to the improvement and enhancement of its strategic advantages. It is therefore not surprising that many professions today persistently strive to introduce and respect the code of ethics and that exactly business ethics is seen as one of the key concepts of modern business. Theory points out that the characteristics of members of the profession are possession of not only certain intellectual abilities, but also adherence to common rules of conduct in providing professional services and the acceptance of commitments to the association, employers and society as a whole with a tendency to harmonize the personal interests with the broader interests of the profession (Stojanovic, R., 2015).

Global trends in the development of the world economy, long present financial crisis, and thus internal latent moral hazard led to the "identity crisis" of the accounting profession as well as to the structural problems within it. Although the application of International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS) requires uniformity the opportunities offered by the standards give freedom to accountants for approximation of the real situation on the financial position and business success. It often happens that given freedom is misused, as evidenced by the numerous accounting scandals from the end of the last century. Professional accounting body IASB¹, or IFAC² adopt, or commit to a consistent application of the Code of Ethics for Professional Accountants, and the core values of integrity, transparency and expertise. The Code of Ethics is a set of rules or a set of norms of moral character, which regulates the conduct of members of certain professions. Professional accountants today provide a variety of services which include high responsibility of the profession to the public and which ultimately led to the creation of the Code of Ethics. Accounting institutes operating in Montenegro are

¹International Accounting Standards Board

²International Federation of Accountants

full or associate members of the IFAC, which in a direct way implies the commitment of its members to adhere to all the principles that are laid down by the International Ethics Standards Board for Accountants.

The paper aims to examine how and to what extent the respect of ethical principles of conduct in the professional work is important in terms of the accounting profession, especially in the creation of reliable financial statements. Since the question of ethics and ethical conduct, the question of moral dilemmas arises in all stages of life, not only personal but also professional, the research that is in the focus of this paper was intended to realize how and to what extent learning about ethics (in society, school, family, etc.) may contribute later to better ethical business judgment. In this paper, the authors put special emphasis on the accounting profession, where as one of the main arguments they state numerous financial scandals that have been incurred by the end of the last century and that exactly have been caused by the unethical conduct of accounting community factors. The authors tried to make this paper more comprehensive, and therefore they had two focus groups: students and professional accountants. The intention was to examine a) perception on ethics at the level of higher education, involving students who have preferences for accounting or accounting profession; b) perception on the ethical conduct of professional accountants, as well as the moral dilemmas they encounter when performing activities. In addition to the research part, the paper will provide an overview of the literature about the problem that is the focus of research, with the aim of setting hypotheses, as well as their later confirmation or refutation.

Finally, one of the main motivators for starting research on this subject is the fact that foreign, and particularly domestic research public does not have paper on this subject. Through this paper, the authors will try to answer some of the questions, to open new ones, but also seek to interest individuals and general public who are close to these issues to initiate a discussion referred to above in the coming period. Finally, we emphasize that numerous foreign literature, but not domestic abounds with researches dealing with the issue of education in the field of general business ethics, but not with specific education in the field of accountant ethics.

2. LITERATURE REVIEW

Ethical theories give individuals and organizations a framework to distinguish good from bad, so they are often defined as "the rules and principles that define good and bad, for any situation" (Andrew Crane, Dirk Matten, 2004). Ethics, as a science that studies the principles of proper, good and moral behaviour refers to "efforts by which it is decided what to do, how to do or how to live" (A.C. Wicks; R. E. Freeman; P. H. Werhane; K. E. Martin, 2010). Some of the most popular theories are certainly descriptive normative theories that are based on the moral evaluation of the consequences caused by a certain decision or business move. On the other hand they take into consideration the moral

judgment and system of values of the person who brings a certain decision, as well as the motivation for making the same. In fact, ethical theories covering the part of the "grey zone" that is not covered by legal provisions, which allow decision-makers to, according to the given situation, self-assess their work or to create their ethical-moral assumptions. Therefore, it is possible to meet different conception of ethics in the literature. For example, Kalacun (2001) defines ethics as the science of moral decisions and behaviour. Griffin (1993, p.90) defines ethics as an individual's personal beliefs regarding right and wrong behaviour. Ethical behaviour is also as behaviour that conforms to generally accepted social norms (Griffin (1993, p.90). Loucks (1987, p.2) further suggests that ethics is seen as something beyond obedience and adherence to the law. It implies an understanding of what is the good, or right, thing to do and of an internal system of beliefs and values that guide those actions. Exactly this definition of business ethics corresponds to the most important mission it has, and that is efficient, effective and morally responsible business decisions making. Taking into account the recent occasions that have caused the global economic crisis and the confidence fall in many companies and its business, it is clear that the moral behaviour of an individual, but also economic organizations have an invaluable importance.

Ethics refers to the moral values and principles that guide action and behaviour (Emerson, 2009). Ethics is a conception of conduct as either right or wrong (Post, Lawrence, & Weber, 1999). Spence and Van Heekeren (2005) conceive of ethics as a set of prescriptive rules, virtues, values, and principles that inform and guide conduct.

Social trends and practice have a significant impact on the formation of ethical standards, which indicates that the ethical norms are also dynamic category, which is in direct correlation with contemporary social movements. This connection actually witnesses the importance of the relationship that exists between theory on the one and practice on the other hand in the process which forms the ethical behaviour.

There are many different definitions of business ethics by various writers and theorists. However, these definitions of business ethics are universal in their understanding of what constitutes business ethics and good ethical practices. According to Twomey and Jennings (2011), business ethics refers to the application of ethics to business practices. Lawrence and Weber (1999) state, business ethics is not a special set of ethical ideas different from ethics in general and applicable only to business. Thus, understanding common practices deemed right and wrong, ethical and unethical, and knowing the laws of a community or society will be enough to apply ethics to a small business venture. Some authors are of the view that the term "business ethics" is questionable, terminologically unacceptable precisely because it brings together two different perspectives: economic and moral. Milton Friedman believes that "the economy is no obligation in the moral sense and that companies have only and exclusively economic responsibility". Kar, Z. A (2001) believes that business ethics is only

"bluffing", or good calculation and that the company's management opts to morally correct procedures only when it has to, in order not to come across a public condemnation, while in other case the moral standards are not binding them, only the law obliges them. On the other hand, some authors state (Šijaković, 2008) that the absence of business ethics, sooner or later, will lead to negative financial and reputational consequences for the company. The present controversy, which every day becomes more significant, and whose "fire" further stir up the daily turbulence on global, regional or national markets, is actually confirmation of the need of the basic and continuous scientific, but also educational treatment of business ethics.

Theoretical approach to the development of business ethics in recent years has focused on the ex-ante reaction instead of the current ex-post approach, with specific attention to the accounting field which is fully justified taking into account the number and intensity of possible frauds that took place in this area of business life. For example, research to better understand the current and future state of the field has been conducted in entrepreneurship (Busentiz et al. 2003), information systems (Holsapple et al. 1993), accounting (Howard and Nikolai 1983), finance (Alexander and Mabry 1994), marketing (Theoharakis and Hirst 2002), and operations management (Vokurka 1996). As scholars gain additional insight and understanding of the business ethics field, they can take an informed approach to holistically understand and solve the challenges facing the field. In that part, Caliyurt&Crowther (2006) believe that ethics education is expected to reduce the level of fraud in the business world by integrating ethics into accounting programs. However, this is not a unique attitude, precisely because there are divided opinions of the authors concerning the above. Some are of the view that education of students in the field of ethics has a positive influence on future ethical reasoning, while others are of the opinion that the ethics is "acquired" and that cannot be taught. The research conducted by Joseph L. Badaracco and Allen Webb was aimed to determine whether the knowledge gained during the training of students who have attended business ethics and were engaged in the research of this issue influenced the later business ethical reasoning. The research involved about 30 students of Harvard Business School, and has shown that students, and later young managers, were constantly under pressure from their superiors to act unethically. By superiors directly or indirectly it was pointed out to them that the result, loyalty, law, etc. is something that should be above ethical behaviour. This research led to the conclusion that learning about ethics should be a continuous process, that should not stop at obtaining an academic degree, and that should be an integral part of corporate culture.

Ethical conflicts and dilemmas "may be either soluble or insoluble and usually occur in situations that include uncertainty" (Kermis, 1987), difficulty or time pressure (Palazzo et al., 2012). "Dilemmas, however, are by definition always insoluble and require a group or individual to choose between two equally balanced alternatives. Typically, when confronting a dilemma one is faced with

the situation of making a choice that requires either rejecting a desirable goal or action, or accepting an undesirable goal, action or consequence. Although value dilemmas are always insoluble, some may be somewhat ameliorated. When ethical dilemmas are clarified, individuals have a better means of examining the level and type of value conflicts they are confronting” (Kermis, 1987)

In fact, when it comes to accountants’ moral thinking, Bean and Bernardi (2007) state that ethics education is essential for certified public accountants, and it must be learned either at college level or professional level ethics courses in accounting. Before all, recognition of the importance of ethics education in business and accounting schools by both faculty members and students is the first step in achieving the targeted goals. Also, the empirical research which was carried out among students in Australia indicates that students are of the view that the education in ethics is very important, so they believe that the same should be incorporated in the accounting syllabuses and courses (Adkins and Radke (2004)).

When professional accountants focus solely on compliance with the rules, they may easily lose sight of the moral implications of their actions and may often use the rules as a justification for unethical behaviour. It is often convenient to confuse what is legal with what is the right thing to do. (p. 90).

Ethical behaviour in auditing or in any other activity is no more than a special application of the general notion of ethical conduct devised by philosophers for men generally. Ethical conduct in auditing draws its justification and basic nature from the general theory of ethics. Thus we are well advised to give some attention to the ideas and reasoning of some of the great philosophers on this subject (Mautz&Sharaf, 1961, p. 232).

The recent blatant violations of the Independent Rule by the world’s largest accounting firm, Arthur Anderson and co, suggest there is a serious gap between what society expects of accountants and what accountants expect of themselves. Unquestionably, the Enron scandal has wreaked more havoc on the accounting profession than any other case in the United States history (http://ijbssnet.com/journals/Vol.202_No._10;_June_2011/29.pdf).

Accounting education, must train leaders of the profession who will be honest, trustworthy and of ultimate personal integrity. The educational process must recognize that ethics is not simply being aware of a code of professional ethics. The development of competent accounting professionals will require approaches that impound the issues raised in this paper. Programs need to be designed that bring the issues and development of personal and professional ethics into the realm of a core competency required of all those entering the accounting profession. The goal for future leadership can only be achieved if both the contextual and personal codes of ethics and their underlying basis are understood. The dilemmas leading to choices must be articulated so that individuals understand that there are consequences to the choices they make – as

individual practitioners, as members of audit teams, or as employees in larger organizations.

Finally, the research which was carried out in the field of consideration of previous experiences gained by performing certain activities, indicates that business ethics should be focused on creating self-regulating mechanisms, and on the correction of previous bad experiences with the unique goal of building a corporate social responsibility (Zadek, 1998).

3. METHODOLOGY

3.1. Research objectives, hypothesis and research period

The aim of this paper is to show the perception of students as well as members of the business community who are close to accounting issues regarding the notion of business ethics as well as its role and importance achieved in terms of the development of the accounting profession and accountants in general, as a protector of the public interest. Through this paper the authors want to consider the ethical dilemmas encountered during accountants' conduct, as well as to realize their behaviour in relation to the users, the profession and the public in the broad sense of the word (external users). Through research conducted in the paper, the authors assume that there is a significant role of the primary but also any other education in terms of conception and design of ethical standards of procedure, as well as the education in these domains may affect the improvement of each profession. Every profession, including accounting assumes respect of certain ethical principles which are the fundamental basis for building trust in the financial system of a particular country. The authors believe that respect for the principles of professional ethics contributes to the protection of the accounting profession from the behaviour of individual accountants and auditors who by their inappropriate actions could undermine the dignity of the profession.

The accounting profession is one of the professions that carry a great responsibility, which is ultimately reflected in the creation of the Code of Ethics. The performance of professional services in an ethical sense implies a commitment to the public interest and absolute respect for basic moral principles with the realization of the set objectives of the accounting profession. The Code of Ethics has the function of stimulating the knowledge, judgment, consideration of the individual case, consideration of professional difficulties and coping with different situations. In order to achieve the objectives of the accounting profession, professional accountants should adhere to a number of prerequisites or fundamental principles, namely: integrity, objectivity, professional competence and due care, confidentiality, professional behaviour, technical standards.

In the context of the above, the authors of the paper endeavoured, taking into account the specificity of the Montenegrin economy, turbulent historical past, a dynamic political turmoil, transition events, as well as the current tendency of entry

into the European Union, to consider the accounting profession from the perspective of ethical dilemmas. This is particularly because it is latent possible to hear opinion, as in academic as in professional circles, by which the accounting profession is not one of the highly ethical profession. This becomes particularly due to the fact that there is no regulatory limit on who can draw up and sign a financial statement and by implication what often happens in practice, to create financial statements according to the requirements and needs of the responsible person within the legal entity.

Thus answers of respondents who were covered by the survey researches, their perception and understanding of ethics and in general accounting profession from the perspective of moral dilemmas will serve as a direction for further action in the specified domain.

The authors conducted the research in the period March - May 2016 namely from two aspects:

- The first aspect for which the authors believe is fundamental and represents a starting point for further research, included the perception of students of Faculty of Economics, University of Montenegro. It is about the students of the second, third and fourth year of the Faculty of Economics who until now had the opportunity to attend a course in accounting;
- The second aspect of the research is related to the perception of ethics and ethical dilemmas, as well as the ethical conduct of professional accountants from the perspective of Montenegrin companies, which by the structure mainly consists of small and medium enterprises.

The questionnaire for students was aimed at recognizing the importance of the general conception of ethics, as well as the perception of the concept of corporate social responsibility and business. Also a special segment of the questionnaire was aimed at recognizing the importance of education in the field of ethics, but also the application of ethical norms and standards in accounting practice.

The questionnaire designed for the companies was made up of three parts. The first general part relates to the characteristics of the company and previous experiences in accounting practice. The second part of the questionnaire relates to the recognition of the importance of ethical education for the purpose of design and application of the Code of Ethics; the third final part of the questionnaire was aimed at collecting accountants and employees data about the existence and applicability of the accounting Code of Ethics in Montenegro, but also the identification of the main objectives which are necessary to be achieved by the successful application of ethical behaviour in accounting practice.

Many international professional accounting organizations recognize the responsibility of the accounting profession, and the role of business ethics is seen as providing ethical guidance to their members, with the aim of better and socially more responsible performing of complex duties conducted by the accounting professionals.

The paper set two hypotheses:

H1: Business ethics has a great influence on proper reasoning of situations concerning the ethical dilemmas of professional accountants;

H2: Primary education in the area of business ethics largely contributes to the socially responsible behaviour of individual and accountants;

3.2. Population and sampling design

The research included 88 persons, professional accountants who are employed in banks, budget institutions, manufacturing / trading companies, insurance organizations, etc. From the analysed companies, 60.2% are classified as small, 24.1% as medium, and 15.7% as large enterprises. In more than half of the analysed companies, the accounting function is organized as a financial accounting function with the constant engagement of no more than three employees. The average age of employees in the accounting service is about 40 years. In 89.3% of cases the head (manager, administrator) of the accounting service have a university degree.

4. RESULTS

Only 34 participants attended the seminar on ethics during their education, and teaching discipline relating to business ethics during university education was offered to 26 of them, Tables 1 and 2.

Table 1

Was in the curriculum of your faculty discipline relating to business ethics during university education				
		Frequency	%	Accumulated series %
Valid	Yes	26	29.5	29.5
	No	49	55.7	85.2
	Not sure	13	14.8	100.0
	Total	88	100.0	

Table 2

Have you ever attended a seminar on ethics during their education?					
		Frequency	%	Valid %	Accumulated series %
Valid	Yes	34	38.6	39.1	39.1
	No	42	47.7	48.3	87.4
	Not sure	11	12.5	12.6	100.0
	Total	87	98.9	100.0	
Missing	1	1.1			
Total	88	100.0			

The respondents who did not, in the context of university education, have teaching disciplines of business ethics provided by the curriculum, greatly emphasized (87.75%) that they would attend classes on the subject Ethics, if it had been offered to them as an elective course at the Faculty. Those who attended the course on Ethics dominantly (77.78%) believe that it helps them in dealing with the moral and ethical issues facing the accounting profession and the business community as a whole. The survey results indicate a general interest of companies in ethical issues and dilemmas, as well as in creation and possession of the companies' Code of Ethics. Also, about 54% of the respondents believe that the Code of Ethics of the company is respected and fully implemented and that their company has a strong ethical basis for making appropriate decisions.

To make an inference about the acceptance of the hypothesis of whether there is a correlation between the ethical basis for the adoption of relevant decisions of the company and the possibilities of establishing the boundary that defines morality in business of managers/employees, testing was conducted using the chi-square test with borderline significance of 5%. Table 3 shows data of double statistical table in which sublimated answers to the following two survey questions are shown.

Table 3

		Did you as a manager / employee able to determine the boundary that determines whether something is in the business of moral or not?			Total
		Yes	No	Not sure	
The company to which I belong has a strong ethical basis for making appropriate decisions?	Yes	44	0	2	46
	No	13	1	4	18
	Not sure	10	2	8	20
Total		67	3	14	84

The data presented in Table 3 shows that 44 of the respondents believe that their company has a strong ethical basis for making appropriate decisions and that they are as a manager/employee able to establish the boundary that determines whether something is moral or not in business ? The testing results of independence between the ethical basis for making appropriate decisions of the company and the possibilities of establishing the boundary of morality determination in business of managers/employees are shown by the chi-square test in Table 4.

Table 4

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.906 ^a	1	.000
Continuity Correction^b	13.804	1	.000
Likelihood Ratio	17.183	1	.000
N of Valid Cases	84		
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.69.			
b. Computed only for a 2x2 table			

According to the test results shown in Table 4 it can be seen that the empirical significance of the chi-square test is $\alpha^*=0.000 \Rightarrow \alpha^* < 5\%$, so it brings to the conclusion about the dependence of the ethical basis for making appropriate decisions of the company and the possibilities of establishing the boundary of morality determination in business of managers/employees, which supports proving the hypothesis H1.

Almost 77% of the respondents answered that they behave the same way when making decisions in their private lives as well as in decision-making in a company or other business environment. With regard to the assessment of the ethics importance in the business community, the education system, personal or business decision-making, the respondents gave the following assessment:

Table 5

How important is the respect of ethics in the business community?				
		Frequency	Percent	Cumulative Percent
Valid	2.00	2	2.3	2.3
	3.00	5	5.7	8.0
	4.00	21	23.9	31.8
	5.00	60	68.2	100.0
	Total	88	100.0	

Table 6

How important is business ethics in education system?				
		Frequency	Percent	Cumulative Percent
Valid	2.00	2	2.3	2.3
	3.00	12	13.6	15.9
	4.00	17	19.3	35.2
	5.00	57	64.8	100.0
	Total	88	100.0	

Table 7

How significant is, in the personal decision making process, respecting of ethical rules and norms?				
		Frequency	Percent	Cumulative Percent
Valid	2.00	1	1.1	1.1
	3.00	5	5.7	6.9
	4.00	13	14.8	21.8
	5.00	68	77.3	100.0
	Total	87	98.9	
Missing		1	1.1	
Total		88	100.0	

Table 8

How important for you is ethical behaviour in case of decisions making at the workplace?				
		Frequency	Percent	Cumulative Percent
Valid	3.00	4	4.5	4.5
	4.00	21	23.9	28.4
	5.00	63	71.6	100.0
	Total	88	100.0	

Table 9

Statistics					
		How important is the respect of ethics in the business community?	How important ethics in the education system?	How significant is, in the personal decision making process, respecting of ethical rules and norms?	Rate the importance of ethics - How important for you is ethical behaviour in case of decisions making at the workplace?
N	Valid	88	88	87	88
	Missing	0	0	1	0
Mean		4.5795	4.4659	4.7011	4.6705
Median		5.0000	5.0000	5.0000	5.0000

Looking over the average grades of ethics evaluation in the aforementioned aspects of life and work, it can be concluded that the respondents gave approximately the same average grades of the ethics importance in the business community, the education system, personal or business decision-making, 4.6; 4.5; 4.7 and 4.7; respectively, or 50% of the respondents gave grade 5 to the importance of ethics in all four mentioned segments. Over 70% of the respondents were familiar with the existence of the Code of Ethics for Professional Accountants. However, only 36% of them know the content of the Code of Ethics for Professional Accountants very well. For most of them, it is very important to respect the principal of the Code of Ethics for the accounting

profession and 93% of them adhere to the principles of the Code of Ethics for Professional Accountants while performing accounting tasks, completely or partially.

Only 10.2% of the respondents believe that the accounting profession is free and independent profession, relieved of pressures, Figure 1.

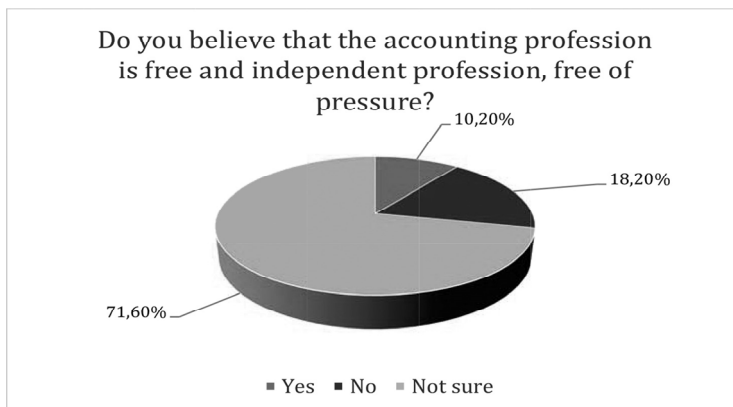


Figure 1

For the improvement of the accounting profession the respondents assessed the importance of each of the five proposed goals of the education process for the development of the accounting profession, Table 10.

Table 10

Statistics						
		Education in the field of ethics makes the acquisition of knowledge for the improvement of the accounting practice?	Applying ethical standards helps to resolve accounting issues that have ethical implications (dilemma)?	Education in the field of ethics helps the development of ethical / moral responsibility with the accountant?	Ethical education helps development of competences required to resolve conflicts or dilemmas that may arise in the field of accounting profession?	Through continuous development and improvement of the educational framework in the field of ethics, contributes the establishment of conditions to mitigate or eliminate the identified deficiencies ethical behavior of accountants?
N	Valid	88	88	88	88	88
	Missing	0	0	0	0	0
Mean		4.1818	4.2727	4.3409	4.3636	4.4545
Median		4.0000	4.0000	5.0000	5.0000	5.0000

To improve the accounting profession through the process of education the most important objectives for 50% of the respondents are: education in the field of ethics helps to develop ethical/moral responsibility among accountants, ethical education helps to develop the capacity necessary to resolve conflicts or dilemmas that may arise in the field of accounting profession, and continuous

development and improvement of the educational framework in the field of ethics contributes to the establishment of conditions to mitigate or eliminate the identified deficiencies in ethical behaviour of accountants.

For the purposes of proving the hypothesis H2: Primary education in the area of business ethics greatly contributes to the socially responsible behaviour of individuals and accountants, the research was also conducted on a sample of students (n = 82). The respondents were students of the II, III and IV year of the Faculty, with the following participation: 15.9, 29.3 and 54.9%. These are mostly students who do not have experience in voluntary work and who have not attended the seminar on ethics during their education. 15% of the surveyed students have the information about the existence of teaching discipline relating to the business ethics at their faculty, while 60.3% of students would attend classes on the subject Ethics, if it had been offered to them as an elective course at Faculty. Even 86.1% of students believe that the existence of ethics in the curriculum can help students in solving moral and ethical issues they face in their private lives as well as in the business world in general, and for the majority of them business ethics is a necessary course for university education.

Table 11

Do you believe that the existence of ethics in the curriculum can help students in solving moral and ethical issues faced in their private lives as well as in the business world?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	68	77.3	86.1	86.1
	No	1	1.1	1.3	87.3
	Not sure	10	11.4	12.7	100.0
	Total	79	89.8	100.0	
Missing		9	10.2		
Total		88	100.0		

The need of primary education in the area of business ethics of individuals and accountants is supported by the data presented in the following table.

Table 12

		Did you as a manager / employee able to determine the boundary that determines whether something within the business is moral or not?			Total
		Yes	No	Not sure	
Have you ever attended a seminar on ethics during their education?	Yes	31	0	3	34
	No	28	3	9	40
	Not sure	9	0	1	10
Total		68	3	13	84

Out of 34 accountants who have attended a seminar on ethics during their education, 31 of them believe that as a manager/employee they are able to establish the boundary that determines whether something is moral or not in business. Similarly, out of 26 of them who had the teaching discipline offer relating to business ethics, 24 are able as a manager/employee to establish the boundary that determines whether something is moral or not in business.

Table 13

		Did you as a manager / employee able to determine the boundary that determines whether something within the business is moral or not?			Total
		Yes	No	Not sure	
Was in the curriculum of your faculty discipline relating to business ethics during university education	Yes	24	0	2	26
	No	35	2	9	46
	Not sure	9	1	3	13
Total		68	3	14	85

5. CONCLUSIONS AND RECCOMENDATIONS

The research results conclusively indicate that the importance of education is set to the highest level, and that respondents identify education as a very important factor for the appropriate professional and career development. Also, there is a large "gap" in the educational sense, which is reflected in the fact that a significant number of the respondents did not attend a seminar / program on ethics during their university education. On the other hand, there is a high interest in attending the programs in the field of ethics, especially among those respondents who have not attended these programs. Just pointed suggests the need for organizing seminars or the teaching discipline offer in the field of ethics, because the respondents recognize the importance and value that these seminars / programs could bring to them. This view is further confirmed by the attitude of the respondents expressed in a high percentage (77.78%) that education in the field of ethics helps them in solving moral and ethical issues facing the accounting profession and the business community as a whole.

As the most important objectives in the field of education, the respondents identified: education in the field of ethics helps to develop ethical/moral responsibility among accountants, ethical education helps to develop the capacity necessary to resolve conflicts or dilemmas that may arise in the field of accounting profession, which confirms the hypothesis that business ethics has a great influence on moral reasoning among accountants. Also, by the research processing it was concluded that in companies in Montenegro that have established the Code of Ethics, the same is substantially (54% of the respondents)

respected and fully implemented and that their company has a strong ethical basis for making appropriate decisions.

Accounting professionals are greatly familiar (over 70% of the respondents) with the existence of the Code of Ethics for Professional Accountants, but only 36% of them are familiar with its contents. For most of them it is very important to respect the principals of the Code of Ethics for the accounting profession and 93% of them adhere to the principles of the Code of Ethics for Professional Accountants.

By this research, the authors confirmed the set hypotheses about the correlation that exists between the primary education in the field of ethics, business ethics and professional conduct of accountants. Also encouraging is the fact that, according to the nature of the business, the respondents expressed affirmatively to further education strengthening in the field of business ethics, so that the recommendations of the authors are in favour of the above statement. However, on the other hand, worrisome is the respondents' view that the accounting profession is subject to pressure, and that is not an independent profession. In this segment, the authors are of the view that the academic community and especially professional accounting bodies, through continuing education seminars, should further familiarize holders of the accounting profession with the Code of Ethics for Professional Accountants to incorporate the same in their culture behaviour. Only in this way, among other things, it is possible to build a reliable financial reporting system and restore confidence in the shaken accounting profession as well as in the primary role of the information contained in the financial statements.

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POSLOVNA ETIKA KROZ PRIZMU MORALNIH DILEMA U RAČUNOVODSTVENOJ STRUCI U CRNOJ GORI

Sažetak

Mnoga zanimanja u modernom poslovnom okruženju masovno uvode etički kodeks- Zato je Međunarodna udruga ovlaštenih računovođa (IFAC) sastavila Etički kodeks za ovlaštene računovođe. Problem kvalitete financijskih izvješća došao je u središte pažnje nakon kolapsa velikih tvrtki i loših ocjena pouzdanosti financijskih izvješća velikih procjeniteljskih tvrtki. U ovom radu nastojat će se prikazati utjecaj poslovne etike i moralnih dilema na kvalitetu financijskog izvještavanja. Rad se temelji na hipotezi da tvrtke s većim stupnjem predanosti i poslovne etike imaju kvalitetnije financijske izvještaje u odnosu prema tvrtkama za koje je procijenjeno da imaju nižu poslovnu predanost. Kako bismo ostvarili zadani cilj, rad smo podijelili u dva dijela. U prvom dijelu daje se pregled važnosti računovodstva kao zanimanja, njegove etičke dimenzije i uloge koju ima u postizanju kvalitete financijskog izvještavanja. Drugi dio sadrži praktični pregled obrađenih teorijskih problema na primjeru susjednih zemalja koje su u fazi primanja u Europsku uniju ili su već njezini punopravni članovi.

Ključne riječi: financijsko izvještavanje, računovodstvo kao zanimanje, EZ, etička dimenzija.

JEL klasifikacija: M41; M14

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SUPPORTING UNIVERSITY TECHNOLOGY TRANSFER - STRUGGLES AND BARRIERS IN LATVIA

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Abstract

The goal of enhancing science-industry cooperation with the aim to boost countries' innovation performance has been a part of various development strategies in European countries for quite some time and an array of incentives is targeted at elements of national innovation systems in order to facilitate university technology transfer. This paper aims to discuss these incentives in Latvia - a small country in transition, with a relatively poor innovation performance and with a pressure to shape its industrial and research policies towards industrial development and sustainable growth. Latvia is a country still recovering from the recent financial crisis and trying to overcome the problems of the past when it was a part of the Soviet Union - a background that gives specific characteristics for the environment in which researchers and firms operate. This paper focuses on the chosen policy mix and incentives for supporting science-industry linkages in Latvia and how it matches the structure of the economy. We suggest that the chosen approach (which is more often than not inspired by foreign success stories) fails and causes a mismatch between both realms and thus slows down the improvement as it tries to address not the causes

of low cooperation such as business sector's low innovation absorption capacity that impacts technology transfer processes in a significant way, but instead alleviates the symptoms e.g. low R&D expenditure. We use case study approach, relying on desk research, interviews with key policy makers as our data sources.

Keywords: *University technology transfer, research and industrial policy, innovation absorption, policy transfer, policy failure*

1. INTRODUCTION

Knowledge and technology transfer activities are considered an important driver of innovation performance and need to be looked at when a country aims to improve this performance (Calcagnini & Favaretto, 2015). Thus, it is no surprise that a vast amount of literature is dedicated to the topic. In the US, the issue of technology transfer and university-industry collaboration became increasingly contested during the late 1970s to 1980s, in part for political reasons, but also due to concerns about the country's competitive advantage in the increasingly global marketplace (Grimaldi, Kenney, Siegel, & Wright, 2011; Mowery, Nelson, Sampat, & Ziedonis, 2004). In a similar fashion, the debate about necessary incentives to support technology transfer and science-industry collaboration has intensified in the European Union over the last decade. The worst performing Member States of the EU now face significant pressure to improve performance in these activities. To counter the apparent malperformance, governments have been developing and implementing reforms to establish well-balanced innovation systems within their countries, including university reforms to improve technology transfer (Calcagnini & Favaretto, 2015; Goldfarb & Henrekson, 2003).

However, in some cases it has been a challenge stretching out for more than two decades and still ongoing. One of such cases is Latvia – a post-Soviet country who restored its independence in 1991. Same as for some other Central and Eastern European (CEE) EU member states, there is still a long way for Latvia to catch up on countries that are European innovation leaders – Denmark, Sweden, Finland and Germany (European Commission, 2015). When looking for solutions, policy makers often rely on case studies of best examples from the universities in the U.S. and the aforementioned European innovation leaders. However, the best practice examples from the innovation frontrunners are not that easy to implement. At the same time, government incentives (or lack of thereof) in countries with poor innovation performance is not as widely discussed and explored for policy making purposes. Additionally, while there is literature discussing knowledge and technology transfer activities as such, considerably less literature touches upon various policy instruments that the governments could exploit to support these activities and how the specific support initiatives are designed at government level (Rasmussen, 2008). Therefore, we intend to cover this gap in the literature.

One explanation for the relative weakness of innovation performance in Latvia is the weakness of its institutions – both formal and informal – largely being the result of transition. However, to explain the somewhat weak performance in terms of technology transfer, one has to look at the source of funds for R&D and innovation, which currently plays a very significant role. In many of the CEE countries with weak innovation performance, private sector R&D spending is lagging behind public investment. At the same time a substantial part of public investment in some countries, including Latvia, comes from European Structural and Investment Funds (ESIF). ESIF funds, however, have their own constraints, such as greater bureaucracy if compared with national funding, as well as limitations to commercial exploitation due to incorrect application of state aid regulation. Therefore, this paper aims to contribute to the discussion on university technology transfer of publicly funded research results. We also discuss ways to improve innovation performance in countries in transition by discussing the experience of Latvia - a small country with relatively low R&D spending both in absolute and relative terms (0.68% of GDP in 2014) and a historical background that continues to influence the economy resulting in low innovation absorption capacity among other things. Despite implementing major structural changes the question whether they have been successful is still relevant for Latvia even after a decade within the EU.

The paper provides a case study of government incentives in Latvia that are aimed at fostering science-industry linkages and university technology transfer. The second section looks at the historical background and structural changes that impacted and continues to shape the national innovation system significantly as well as the current situation. The third section discusses the types of support programs, their management on a government and also university level. The fourth section evaluates and how well the chosen policy mix matches the circumstances, while the conclusions are discussed in the fifth section.

2. R&D ENVIRONMENT AND INNOVATION SYSTEM IN LATVIA

2.1. Latvian R&D during the Soviet era and the transition period

The roots of current issues within the national innovation system and the problems related to insufficient science-industry linkages in Latvia stretch all the way back to the time when it was a part of the Soviet Union and the subsequent transition period. Because of these events numerous radical changes in the innovation system have occurred and that has left a negative effect on the country's innovation performance.

During the Soviet period Latvia was a part of a massive, inflexible, inefficient and fragmented system without a central overview and efficient coordination (Rambaka, 2012). The system that Latvia was a part of spanned the entire Soviet Union meaning that various processes were often dispersed both

organisation and location wise. It could particularly well be seen by looking at elements of the innovation system - basic research, fuelled by military-driven competition, was connected to the military but not accessible for civil applications due to secrecy issues and was conducted by the Academy of Sciences, the main decision making body in the USSR when it comes to R&D. Applied research was linked to branch institutes and industrial sector. The area that was under pressure from foreign competitors was the military sector. Meanwhile, as Egorov and Carayannis (1999) discuss, many specialists were concentrated in traditional sectors with low potential for innovation and this heritage has also influenced Latvia's innovation performance in years after. Latvia specialised in areas like mechanical and electrical engineering, metallurgy, chemicals, timber, textiles and food processing industries - industries that were areas of specialisation for Latvia already during the interwar period. Latvia had strong industrial research capacities (European Commission, 1999) and despite the overall system being inefficient, scientific achievements were still made in both fundamental and applied research and the Baltic region even was one of few regions in the USSR that commercialised research results, thus attracting foreign investments (Kristapsons, Dageyte, & Martinson, 2003).

After the collapse of the Soviet Union, Latvia restored its independence in 1991, inducing radical changes in all spheres with a complete restructuring of the economy. Once again, Latvia almost instantly found itself without the previously accessible markets – the previous time was when Latvia was first established as an independent state in 1918. Given that peculiar distribution of industrial/applied research in the Soviet Union, where industrial research was performed by dedicated research institutes often serving the needs of industry located in other Soviet republics, after the collapse of the Soviet Union Latvia found itself with excess R&D capacity, which could not be utilised by local industry alone. A similar situation was in the industry more generally, which found itself cut off from its core trade partners. And just as in the 1920s, establishing access to other now missing parts of value chain, such as raw materials and energy supplied from other parts of the Soviet Union, was important. Meanwhile, a decision to continue the support for the enterprises basically meant turning them into burdens for the country as they were unable to respond to the new demands of the market economy. Thus, as markets dwindled, so did the industries were Latvia had specialised. Similarly, the research sector had to adjust to different funding approach, since no elements of competition were present previously.

After initial collapse in the early 1990s, manufacturing industry started to recover after 1996, however, industry was being gradually substituted with services, as the main economic sector. Besides, most of the industry with relatively high value added – the only natural partner for R&D and technology transfer, was declining at a faster pace, initially due to demand shock, but later due to the so-called Vanek-Reinert effect (Kattel, Reinert, & Suurna, 2009). Given that Latvian government from early on decided to rely on liberal economic

policies, and due to budgetary constraints, no substantial support was provided to stabilise and support industry in Latvia. In its report European Commission(1999) particularly pointed out the largest pharmaceutical company in Latvia Grindex who did not at the time receive support from the government to improve business although an R&D intensive company would have been highly favoured by a Western government.

Main policy measures focused on providing basic “life support” to the science and research system as well as integrating research with higher education and linking researchers with existing needs. Another step that needed to be taken was development of a system for research funding that would provide at least the bare minimum horizontally across all filed of science and research.

Because of the planned accession to the EU, it was necessary to direct R&D towards European and national priorities and the first priorities were indeed set in 1997 (Cabinet of Ministers defined priority research fields with the aim of establishing National Research Centres). As no decisions regarding specialization in certain domains in science were made at the time, the priority areas were very broad and inclusive. As many companies and institutes became autonomous, were downsized and in many occasions divided into smaller establishments, the innovation system became very fragmented. Besides, it had very limited funding which was not focused on specific areas in order to get the critical mass necessary to produce high level research outputs, industrial R&D capabilities, the capacity of companies to absorb innovation was reduced (Kristapsons et al., 2003). These characteristics led to challenges to implement coordinated activities and a unified research policy and have influenced science-industry linkages even until this day. Universities and institutes face insufficient R&D funding from the industrial sector as during the early transition years the links between industry and science were broken, research institutions became heavily dependent on state budgets, international co-operation and funding from the EU in form of research grants became a second source of income (European Commission, 1999). There was some development in terms of support for basic research while applied research was somewhat left behind due to insufficient coordination between the Ministry of Education and Science (MoES) and the Ministry of Economics (ME). Up until now, university technology transfer lacks significant results for a number of reasons. First, many companies are reluctant to cooperate because of the bureaucratic funding mechanisms and uncertainty of commercial benefits from investing in R&D among other factors. Second, most of the companies lack the absorptive capacity necessary for uptake of research results produced by universities and research institutions.

2.2. Current R&D and innovation environment in Latvia

According to the Innovation Union Scoreboard 2015 (IUS), Latvia’s overall innovation performance has been ranked the third worst among the EU

member and despite the efforts of Latvian policy makers to include support for innovation in national development strategies. In fact, as Veugelers has argued in a recent paper (2015), the divide between top performers and laggards has been increasing in the EU, where Latvia's innovation performance is just 30 per cent of that of the innovation leaders.

Strategies, reports, assessments and evaluations done by either local ministries or by foreign experts list many causes for this poor performance, such as a fragmented national innovation system, very little funding for research, lack of cooperation and significant under-investment in research from the industrial sector, lack of commitment from the policy makers among others (Arnold et al., 2014; MoES, 2013; Smidova, 2015). The problems and causes of the insufficient performance are not really that different from those identified early in the transition period by the Danish Research Council (1992) and later by the European Commission (1999). Data on R&D expenditure over the last 15 years suggests that the commitment from both private and public sector to R&D has not sufficiently improved. Fluctuations of Gross domestic expenditure on R&D since 2010 are shown in Figure 1.

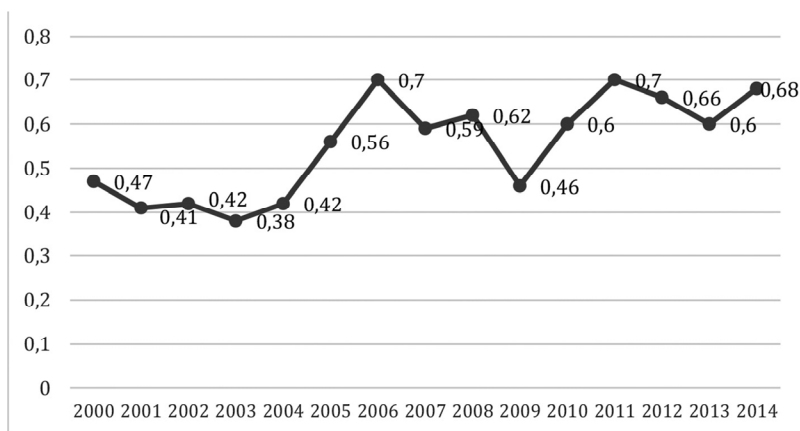


Figure 1 Gross domestic expenditure on R&D, 2000-2012, % of GDP

Source: Central Statistical Bureau of Latvia (CSB, 2015)

Total R&D expenditure in 2014 reached 0.68% of GDP, despite the Law on Scientific Activity (in force from 2005) that states an increase in funding should be at least 0.15% of the GDP on an annual basis until it reaches 1%. However, innovation policy has not really been among the top government priorities – the government doesn't have a long term strategic plan, but is constantly engaged in trying to solve urgent matters instead. This could be seen when the crisis hit and the budget for R&D was one of the first things that were cut and also now – investments in R&D keep fluctuating despite understanding the need to increase it.

The data in Figure 2 show that over time the funds available through various EU programmes have to some extent replaced government funding - total funding for R&D by foreign countries accounted for some 0.30% of GDP in 2014. This is a not a positive trend as the research system should be able to sustain itself when the funds eventually run out.

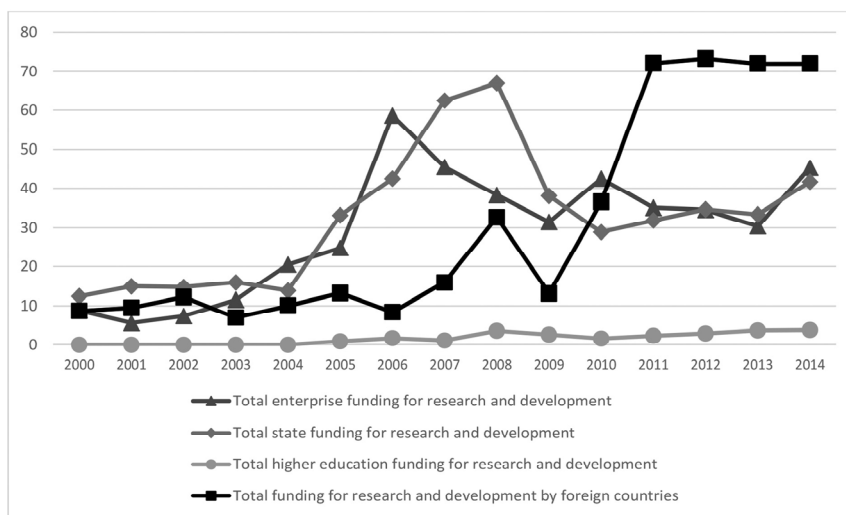


Figure 2 Expenditure on R&D by sector, 2000-2012, mln euro

Source: Central Statistical Bureau of Latvia

Latvia's innovation performance has fluctuated over time. According to the IUS (European Commission, 2015), Latvia is a modest innovator but shows signs of improvement and has recently become a leader in innovation growth. However, Latvia's innovation performance still is below the EU average for most indicators measured by the IUS. Data also shows that in both 2014 and 2015, indicators most important for fostering technology transfer - R&D expenditures in the business sector and public-private scientific co-publications - were among the lowest (European Commission, 2014, 2015). Given that co-authored publications are often an outcome of partnerships or associated interactions, low levels of co-authored publications point to the low level of absorptive capacity of Latvian enterprises (OECD, 2013). Although private sector's R&D expenditure overall has increased since 2000, the amount of investments has been fluctuating (showing a significant decline from 2006) and remains very low, especially when compared to the more advanced EU countries. This suggests that the rate of cooperation and absorptive capacity needs to be improved in order to integrate state-of-the-art knowledge and technology in the companies' operations.

The economic development so far has been based on low labour costs and low tech industries, while absorptive capacity of industry has not increased

significantly (Arnold et al., 2014; Klāsons & Spuriņš, 2015). Arnold et al. (2014) also pointed out that the cluster formation in Latvia is weak and that does not encourage sharing of expertise and infrastructure among the companies, hindering ability to innovate and absorb innovation and build advantages of specialization. The majority of companies in Latvia are small and medium sized enterprises (most of which are effectively micro-enterprises or self-employed people) with limited financial and human resources for innovation that limits the capability to acquire knowledge and technology from R&D institutions and there also seems to be insufficient motivation for that.

As Rodriguez-Pose (2001) argued, in the less developed regions it is prevalence of SMEs, limited supply of skilled workforce, as well as relatively low levels of entrepreneurship that hinder practical application of academic research results, thus constraining the possible positive effects of public investment in research on innovation and economic development.

Additionally, the Commission Country Report (European Commission, 1999) suggested that Latvian companies might face additional challenges due to uneven distribution of research infrastructure in regions as most of it is concentrated in the capital city Riga. A more recent study on business activity in different regions in Latvia (Klāsons & Spuriņš, 2015) argued that only 4% of the companies would consider changing their location to be in closer proximity of R&D infrastructure, thus suggesting that they are not oriented towards technological innovation or interested in collaboration with research organisations.

According to a survey carried out by the Central Statistical Bureau of Latvia (CSB, 2014), while majority of innovative companies have developed technological innovations, most of the funds are directed to infrastructure improvements - almost 94% of expenditure went to acquisition of modern equipment or software in 2012. Only 1% of total innovation expenditure was directed to R&D outsourcing, and 3% to in-house R&D activities. In addition, the results of the survey show that only every fourth company cooperated with someone else in innovation activities - the cooperation partners were most likely other companies or providers of components, software etc., while the least likely partner was higher education or research institutions. Despite investments, most of the companies, with a few exceptions still rely on outdated infrastructure and equipment, which makes investment in infrastructure paramount to retain competitiveness in the export markets. This pattern of investment and collaboration also suggests that the dominant pattern of innovation in Latvian companies is process innovation. As process innovation is learning-by-doing, using and interacting (DUI) type rather than science and technology-based innovation, formal technology transfer through acquisition of patents, etc. is suitable only for a small number of companies that operate in knowledge intensive sectors such as IT, electronics and pharmaceuticals, while for the rest of the economy it has little to offer.

Central Statistical Bureau of Latvia (CSB, 2015) identified 411 companies engaged in R&D in 2014, while the amount of R&D workers was 1382 – 776 R&D

personnel (researchers) in full time equivalent, 606 other R&D staff (technicians and equivalent staff and research supporting staff). Although the number has increased significantly comparing to 2013, the proportion of R&D workers in the business sector is very low and the data still suggests problems with human resources and a shortage in human resources skilled in areas important for technological innovation - possible reason for low innovation absorption capacity.

However, the data on company R&D performance and staff might be imprecise and might be misleading and showing a more optimistic picture, but, as we can see now, not accounting for some innovation. After all the labor force has been declining, while the GDP has been growing since 2010, which means that there are at least some innovations, if not technological, then some process/managerial, taking place. The reason for this is the reporting on company innovation activities that has been rather poor until very recently – when the R&D tax incentive was introduced – there was no formal incentive for most companies to account for R&D and report it. The only exception might be companies with significant share of foreign capital, where accounting standards are higher and therefore also R&D expenditure is also accounted for.

2.3. Governance of research and innovation policy

Meanwhile the science sector is highly dependent on EU funding (that has to a large extent replaced state funding) and therefore has focused its efforts on activities aimed at acquiring research funding and not necessarily addressing market demands. R&D institutions are fragmented and that has negatively affected the distribution of funding. Additional challenge for bringing this fragmented system together is the fragmentation of innovation policy making and implementation across a number of organisations, which is further exacerbated by weak coordination between ministries and in general weak and fragmented governance structures for research and innovation.

The Law on Scientific Activity determines that the Cabinet of Ministers sets the policy for science and technology, however the Cabinet is only involved as the formal decision making body. The Latvian Strategic Council for Research and Innovation, a collegial body under the cabinet created to facilitate cross-sectoral coordination in research and innovation policy, so far has not been effective in providing strategic guidance, as it failed to attract political decision makers. The Latvian Council of Science, whose role in the early transition years was more significant and was that of an advisory body, has in the recent years become more of a funding agency under the Ministry of Education and Science (further - MoES). MoES, on the other hand, has gained a very significant role as the developer and coordinator of science and technology policy since the Academy of Sciences lost its position as a policy making body (Rambaka, 2012). Innovation policy, however, is the responsibility of MoE with its own funding agency - Investment and Development Agency of Latvia (further - LIAA). Both

LIAA and the Latvian Council of Science have not been established as agencies for funding innovation and research, but have instead evolved to fulfil this role (E. Arnold et al., 2014; Rambaka, 2012). However, these are not the only organisations involved in funding R&D or innovation - the State Education Development Agency (under supervision of MoES) is responsible for distributing and supervising funding allocated from ESIF to basic and applied research. Meanwhile a number of smaller organisations are in charge of managing financial instruments to support innovation and entrepreneurship.

As noted above, research an innovation policy relies on horizontal instruments and has not sufficiently helped in focusing research, bridging science and industry, commercialising research outputs from research institutions. Fragmentation of innovation and research policy making and implementation, especially given the limited capacity and capabilities of individual organisations involved, as well as lack of priorities further exacerbate the already apparent inefficiencies.

3. INCENTIVES FOR STRENGTHENING SCIENCE-INDUSTRY LINKAGES

Objectives and instruments of R&D and innovation policy are outlined in two documents - Science, Technology Development and Innovation Guidelines 2014-2020 (MoES, 2013) and Guidelines on National Industrial Policy for 2014-2020 (NIP). This yet again points to fragmentation in R&D and innovation policy making, as STDI Guidelines were developed by the MoES, while NIP was developed by the MoE. NIP focuses on promotion of innovation e.g. improving knowledge capacity, innovation supply, innovation demand, and the technology transfer system. Meanwhile, STDI Guidelines focus on national goals and priorities for science, technology and innovation and is a part of a strategy for smart specialization, as well as promotes fulfilment of the objectives defined in national long-term and medium-term policy planning documents (MoES, 2013). Funding of policy instruments included in the STDI is administered by 3 different organisations - the Study and Science Administration (SSA), State Education Development Agency (SEDA) and the Latvian Science Council (LSC) (ibid.).

Given that innovation policy planning is directly linked to EU 7-year financial planning periods, all measures outlined in the policy documents for the current period haven't yet been launched. In this paper we therefore focus on a set of instruments that were available during the previous planning period - 2007-2013. During this period the MoES was responsible for instruments that provided funding for R&D, while MoE was responsible for instruments aimed at supporting entrepreneurship and innovation.

Two types of support programs can be identified in Latvia, that focus on supporting science-industry collaboration. First, there are incentives that aim to

strengthen the capabilities to commercialise research via structural reforms in research institutions. Second, there are incentives that support applied research projects focused on industrial application and where commercialisation of research could be a possible outcome. Some of the funding for R&D was coming from state budget, but most instruments were funded by the ESIF. The scarcity of state funding prevents implementation of internal motivational instruments thus technology transfer is largely supported by external activities.

To improve the conditions, universities and research institutions programmes like the technology transfer office (hereafter – TTO) programme have been implemented. The aim of the programme was to identify projects with an international commercialisation potential within the research organisations, provide support for securing intellectual property rights, provide consultations for both researchers and companies and provide support in technology transfer. Initially more activities were planned such as establishment of an overarching technology transfer centre that could identify projects with commercial potential in other organisations as well, would look over the unified IP portfolio of the smaller TTOs and would be as a contact point in international licencing cases, however, the economic crisis impacted the programme and it was decided to maintain the support only to the TTOs already established within research organisations.

TTOs are seen by most policy makers as the centre and primary driver of commercialisation efforts, however, as is pointed out in some studies (Grimaldi et al., 2011; OECD, 2013), only a few top universities and research institutions across the world have meaningful income from formal commercialisation of research. Therefore, one could argue, that the main objective of policy makers when developing policy measures aimed at strengthening formal technology transfer is not to improve innovation performance, but to improve the country's position in the Innovation Union scoreboard by improving performance in terms of specific indicators where country's performance is the weakest. As a result, focus is more on the formal performance indicators and not on the real impact on innovation performance in enterprises. Bozeman (2000) describes this as the "Out-the-Door" criterion - organisations respond to external pressure by focusing on the number of deliverables such as cases of technology transfer while the impact of these cases is rarely considered. One of the reason is improvement of statistics that in return improve researchers' chances of acquiring funds while in reality the license agreements have no significant financial value.

An evaluation was done on the results of the TTO programme by the MoE (2016) and the review of their activities showed that while many of the quantitative indicators (national patent applications, revenue of the TTO, contract research) were even overachieved, they had insignificant impact on the economy. During the programme there were 7 cases of sale or licencing of technologies developed by the universities and 20 cases at the Art Academy of Latvia (sales of design projects) and none of them involved foreign companies. 13 spin-off companies were developed, on average around 1000 consultations to companies

or individuals were given annually. The review of the activities also states that TTOs were offering an important support for writing patent applications -while the activities and their results are important and needed, they have not visibly improved science-industry collaboration significantly in terms of technology transfer and joint ventures. Additionally, it is interesting to add that funding was distributed equally among TTOs, disregarding the type and capacity of the institutions, as well as their performance which is not motivating for the TTOs to achieve better results (MoE, 2016).

Similarly, strong emphasis is put on university patenting while university patenting just for the sake of patenting to improve statistics, should be critically evaluated, as already scarce funding goes towards patent maintenance fees, while most of these patents are likely never to be licensed at all.

Figure 3 shows that the number of patent applications originating from Latvia has increased since the 90s reaching 305 patent applications by its residents, 8 by foreign applicants and 174 applications by this country's resident at a foreign office.

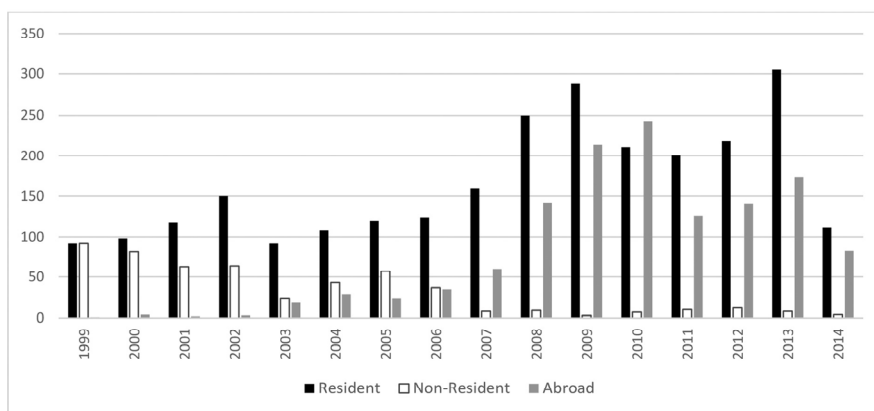


Figure 3 Patent applications from Latvia, 1999 - 2014

Source: *WIPO statistics database*(WIPO, 2016)

The sharp decline in non-resident filing might indicate the lack of interest in Latvian market, while patenting abroad suggests that local companies are seeking opportunities in foreign markets. However, it might also be misleading – as discussed above, ESIF stimulated patent applications and the years showing a significant increase match the years were patents were filed to satisfy the requirements for EU funded projects. Therefore, it does not necessarily indicate improvement. Even more - license and patent revenues from abroad have in the recent years been declining (European Commission, 2014, 2015).

Figure 4 shows the top fields where patent applications are filed. The largest amount of patents is filed within the pharmaceutical, organic fine

chemistry and food chemistry which is not very surprising, taking into account the economic structure in Latvia.

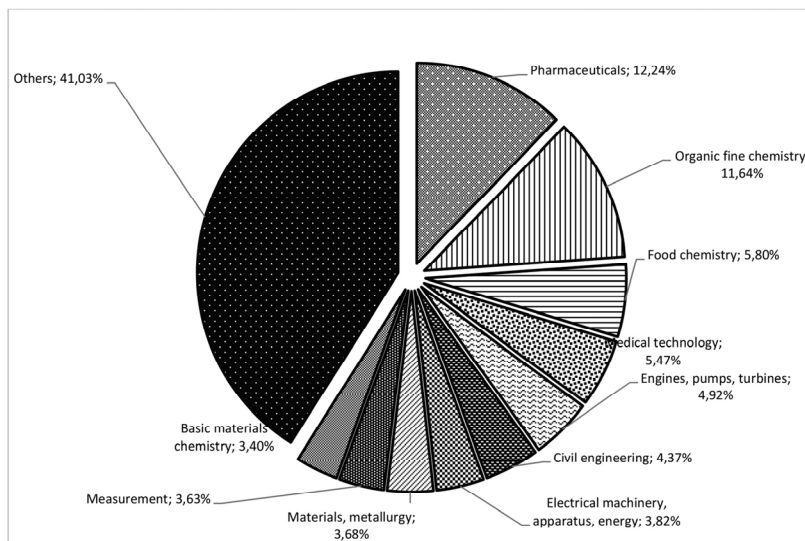


Figure 4 Patent Applications in Latvia, 2000 - 2014

Source: WIPO statistics database (WIPO, 2016)

The number of PCT applications has been steadily increasing since 2000, however, the numbers are relatively low (Figure 5).

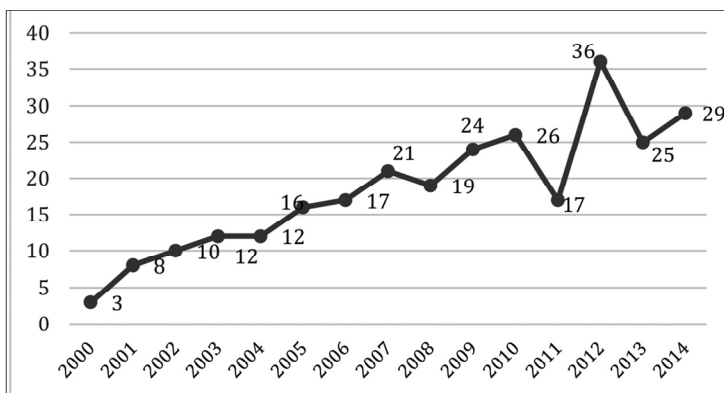


Figure 5 PCT Applications from Latvia, 2000 - 2014

Source: WIPO statistics database(WIPO, 2016)

The top PCT applicants from Latvia are “Grindeks” – the largest domestic pharmaceutical company, Latvian Institute of Organic Synthesis working mostly on drug discovery and development, and Ventspils University College. While pharmaceuticals is the field where the most patent applications are filed, the companies in Latvia are focusing mostly on producing generic rather than original drugs.

When it comes to granted patents, data available on WIPO statistics page, shows that the overall amount has significantly increased since the first half of the 2000s, especially those granted abroad.

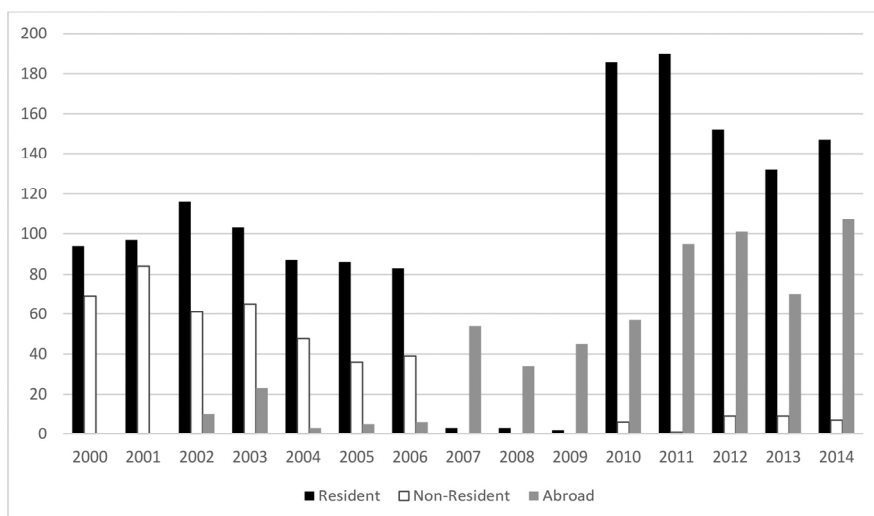


Figure 6 Patents granted, 2000 - 2014

Source: WIPO statistics database (WIPO, 2016)

This increase can be explained by the administrative and financial support from the TTOs and other incentives funded by ESIF. However, as mentioned previously, revenues from licensing are declining and many of the granted patents have found no use for the industry.

Along with formal technology transfer by licensing, there are other mechanisms that universities and research institutions could use, such as academic spin-offs, collaborative research, contract research and consulting, as well as ad-hoc advice and networking with practitioners (Grimaldi et al., 2011). The more informal mechanisms of technology transfer are particularly relevant in economies with process-focused DUI mode of innovation. However, it seems that the Latvian government is more concentrating on supporting formal ways of technology transfer such as contract research and licensing.

The government is pressured to implement these incentives to meet the overall targets of the EU and success stories in other countries are being used as examples. However, the environment for technology transfer varies, therefore doing so might lead to different outcomes than expected by the policy-makers (Grimaldi et al., 2011). According to the OECD (2013), relative performance on many occasions is measured against US institutions that are widely considered to lead in terms of commercialisation outputs, however, as already discussed previously, this approach is not suitable for countries like Latvia. One of the reasons is the structure of businesses in Latvia –the needs of small and medium sized enterprises in traditional sectors often don't match with what researchers can offer. For example, many research projects in Latvia are related to key enabling technologies (such as micro and nanoelectronics, nanotechnology, industrial biotechnology, advanced materials, photonics, and advanced manufacturing technologies) because it gives better opportunities to acquire funding, however, these technologies are often too advanced and too far from the market to be utilised even by the local industry that represent the same field. Therefore, research groups later struggle to commercialise the outputs because there are no potential users among the local companies and infrastructure for technology with a higher readiness level e.g. technology development centres, incubators, parks, prototyping laboratories and experimental plants is not sufficiently developed (MoES, 2013).

Another problem is that the complexity of the rules and regulation of ESIF funded projects and scarce budget make the beneficiaries very cautious in implementation. Therefore, research institutions seem to pay more attention to compliance with regulations rather than to concentrating on societal impact that their results could make. Although the programmes are offering new possibilities, such as the applied research projects, useful tools are overcomplicated thus reducing the positive impact they might have had. Therefore, less complicated implementation rules might encourage not only application for support but also exploitation of the results.

While a second set of instruments helps in bringing new and better qualified human resources into companies(e.g. by raising the competences of researchers and encouraging students to pursue this kind of studies), there are no instruments supporting company-subsidised research positions at universities and research institutes (MoES, 2013), as for example industrial PhD fellowships in Denmark or Sweden. That kind of collaboration would be beneficial for both and could stimulate further cooperation in other ways as well.

4. POLICIES SOLVING PROBLEMS THAT DON'T EXIST?

One could argue that throughout the last 15 years, Latvian decision makers have been copying policy instruments from more successful countries, assuming that those will ultimately improve Latvia's innovation performance. There were, however, a number of flaws in the process that did not and still, in our view, do not allow to reap maximum benefits from public sector interventions.

First, not enough attention has been paid to research and evaluation of the systemic and market failures retarding innovation and development in Latvia. Data collection on innovation activities of enterprises in Latvia has so far been limited to only a few key indicators necessary for fulfilling the EU requirements and no local initiatives to improve data collection have been introduced. Besides, collection of statistical data on innovation has not been followed by effective communication towards businesses regarding the needs for collection of these data, which ultimately negatively affects both the response rates as well as quality of data collected. With the introduction of tax subsidies for R&D spending, one could hope that at least collection of data on R&D spending will improve. However, given that Latvian enterprises are mostly engaged in the DUI type of innovation activities, most of innovative activities will still not appear in statistical reports. Lack of data undermines any efforts to evaluate gaps in the innovation system that need to be addressed via policy instruments. Therefore, if this will not be addressed, policy makers in Latvia will continue looking for the proverbial keys where there is light, and not where the keys are.

Second, as argued elsewhere (e.g. Erik Arnold, Arnulf, Jacobsson, Romanainen, & Smith, 2010; Cepilovs, 2014), there is a general lack of capacity and capabilities in the public sector, necessary to plan, design and implement effective policy instruments. This is further exacerbated by high rates of turnover of civil servants, reaching up to 20 per cent per year (LETA, 2015). Weak capabilities and lacking capacity across the policy cycle lead to a situation where policy instruments are proposed on the basis of results of external benchmarking activities (for example, IUS), as well as best practices from more successful countries. This is not to argue that benchmarking exercises, such as IUS, are not useful or relevant, but should not substitute policy relevant research that feeds into policy practice. Normally such benchmarking exercises utilise a range of indicators that are universally applied across countries, disregarding the specificities of local environment. In case of Latvia, however, performance in a narrow range of indicators from IUS (e.g. R&D spending, PhD graduates, patenting), has served as a reference point for development of a policy mix that has been utilised to support innovation over the last decade, with very minor adjustments. This led to a situation where solutions were chasing problems (as in Béland & Howlett, 2015).

Third, as already argued above, institutional developments that have taken place over the last 25 years, lead to a situation where science and research system has evolved in such a way as to detach itself almost entirely from the needs of domestic industry. While at the same time, given the effects of economic transition, local industry developed following a pattern persistent in many developing economies suffering from middle-income trap – relying on labour cost and not technology as a source of competitive advantage (Griffith, 2011). Reliance on low labour costs, resulted in low level of technological development across all major industries and therefore also low level of absorptive capacity necessary for utilisation of research output.

We argue that besides strengthening the capacity of existing companies by building the competences of human resources and improving infrastructure, additional efforts should be made to support the creation of internationally oriented technology start-ups (that might be spin-offs from universities) and facilitating the interest of cooperation between sectors, not only by reminding the opportunities that innovation brings but also the dangers of not moving forwards.

5. CONCLUSIONS

A substantial mismatch between the existing policy problems and applied policy instruments exists. As a result of this mismatch, most of the policy instruments used to support innovation, and especially so those related to industry-science collaboration and technology transfer through technology licensing, have been ineffective and failed to achieve the economic effects. The only objectives that could be reached if such approach to policy making is maintained further is improving Latvia's position in the Innovation Union Scoreboard. However, this, in our view, is not likely to result in technological upgrading and increased competitiveness of local industry; neither will it lead to sustainable positive outcomes for Latvian economy, which, in our view, is the ultimate objective of public policy.

Latvian policy makers are mainly applying the “Out-the-door” criterion when developing support incentives - the results of research that is funded by public money are predefined and motivates to just deliver the numbers instead of creating the most impact as it is not relevant for receiving the funds. What matters is the number of outputs written in the proposals, e.g. license agreements, patent applications, publications. Higher possible revenue or value of the outcomes is relatively irrelevant or even unwanted as that might cause bureaucratic procedures. Due to the low amount of funding the motivation of researchers tends to be related to being able to survive instead of creating an impact on the market.

As a result, universities and other research organisations have so far focused on reaching the planned goals instead of motivating and creating entrepreneurial spirit among research groups. Incentives within universities should be implemented more to motivate researchers and students into solving

existing problems for the local market or encourage them to go international. Thus more funding for business incubators for technology-intensive companies should be planned together with university funded motivational incentives. Besides, more flexible understanding of technology transfer, including informal technology transfer through, for example, temporary employment of researchers by companies, should be encouraged. This, in combination with suitable financial incentives, could encourage creation of denser collaboration networks between industry and research institutions, potentially improving absorptive capacity of the former.

In addition, to avoid unnecessary loss of funds, the requirements of the support incentives should be balanced with the time span and tailored according to the planned outputs, e.g. if a publicly tendered licence agreement is required at the end of the project it should apply only to projects that are working on technologies with a higher technology readiness level (TRL) and that are e.g. patentable. A large part of research conducted in universities results in know-how and thus this kind of approach with licensing is not appropriate and often further work to ensure the sustainability and continuity of the research should be done. The current approach has created a number of useless patents and caused problems with licensing the know-how – universities have developed commercially viable know-how that has potential but still needs further work and companies are not willing to obtain the licences as for them it is too far from the market to be interesting. Many companies are also driven away by the public tender requirement as it causes issues with confidentiality. A better approach would be to offer funding in steps and to carefully determine the outcomes and TRL for each step.

Governments use quantitative data on transfer cases or patent applications as indicators of how the national innovation system is improving and therefore applying this criterion is rather convenient. The increasing focus on various scoreboards and benchmarking is promoting this kind of approach in countries with a poor innovation performance. Meanwhile there are incentives like funding to establish collaboration platforms that instead does not focus on quantitative results but rather on continuous collaboration that expands beyond the initial aim, e.g. information exchange platforms that expand into consortiums engaged in informal technology transfer activities.

Tech transfer activities of universities rarely go beyond consultations and occasional contract research or joint projects funded by the ESIF - licensing and creation of spin-offs is rare. It is important to introduce new internal incentives at universities to promote entrepreneurial spirit among researchers and raise the awareness of the benefits of technology transfer. Some universities have already developed programmes that award researcher if they bring in a company or develop a commercially viable product, however, the impact of these activities is yet to be seen.

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POTPORA TRANSFERU TEHNOLOGIJE NA SVEUČILIŠTIMA – BORBA S PREPREKAMA U LATVIJI

Sažetak

Europske zemlje u okviru različitih razvojnih strategija već dulje vrijeme imaju cilj unaprjeđivanja suradnje između znanosti i industrije u svrhu jačanja svojih inovacijskih učinaka, dok je niz poticaja usmjeren na elemente nacionalnih inovacijskih sustava kako bi se olakšao transfer tehnologije na sveučilištima. Cilj ovog rada je raspraviti ove poticaje u Latviji – maloj tranzicijskoj zemlji s relativno skromnim inovacijskim učinkom i pod pritiskom oblikovanja svoje industrijske i istraživačke politike u smjeru industrijskog razvoja i održivog rasta. Latvija je zemlja koja se još uvijek oporavlja od nedavne financijske krize i pokušava nadići problem iz prošlosti kad je bila dio Sovjetskog saveza (pozadina koja ima specifične karakteristike okoline u kojoj istraživači i tvrtke rade). Rad se usredotočuje na odabranu grupu politika i poticaja koji povezuju znanost i industriju u Latviji i način na koji se to uklapa u ekonomsku strukturu. Polazi se od pretpostavke da odabrani pristup (koji je često inspiriran pričama o uspjehu u inozemstvu) nije uspješan i dovodi do neslaganja ove dvije domene, te usporava napredovanje jer se ne bavi uzrocima slabe suradnje, poput niskog kapaciteta za apsorpciju inovacija u poslovnom sektoru koji bitno utječe na proces transfera tehnologije. Umjesto toga, ublažava simptome, npr. niske izdatke za istraživanje i razvoj (R&D). Istraživanje je provedeno kao analiza slučaja (case study) koja se oslanja na podatke prikupljene istraživanjem pisane dokumentacije i razgovorom s ključnim kreatorima politike.

Ključne riječi: Transfer tehnologije na sveučilištu, istraživačka i industrijska politika, apsorpcija inovacija, prijenos politike, propast politike

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STUDENT LEADERSHIP, CAREER DEVELOPMENT AND PERSONAL SUCCESS PROFILES

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Abstract

The main goal of this empirical research was to define those predominant leadership characteristics and behaviours found among all four generations of undergraduates at RIT Croatia's Dubrovnik campus. The basic research question was: What is the empirical basis for classifying students into homogeneous groups? The first part of the questionnaire was based on The Big Five Model of Personality characteristics, but the principal research method was the leadership characteristics, career development, and personal success questionnaire created by applying inductive research methodologies to 100 Croatian leaders' interviews. In order to answer the research question, four cluster analyses were conducted. The null hypothesis that there is not a correlation between leadership characteristics among an undergraduate population and demographic variables (number of siblings, place of growing up - city, small place, and large city) was accepted. Based on The Big Five Model of Personality the first cluster analysis generated three homogenous groups of students. The basis for the second cluster analysis was leadership characteristics of RIT Croatia students. The third cluster analysis depended on what represents confirmation of personal success. The

final, fourth, cluster analysis was based on the subjective dimension of career development expectation. All four cluster analyses produced three distinct clusters.

Keywords: leadership characteristics, student development, student leadership profile, career development, personal success

1. INTRODUCTION

Research, from neither a theoretic nor practical approach, into desirable student leadership characteristics pertaining to the development of future leaders that will impact economic performance has yet to be undertaken. The original interest and idea behind such research is to determine leadership characteristics that could be encouraged and developed during the education process in order to increase the number of future leaders.

The purpose of this paper is to detect and analyse characteristics and qualities which represent RIT Croatia's Dubrovnik campus undergraduate students' personalities and to detect leadership characteristics which differentiate four generations of students freshmen, sophomores, juniors and seniors, suggesting an evolution of student personalities. The main goal of this empirical research was to define those predominant leadership characteristics and behaviours found among all four generations of undergraduates at RIT Croatia's Dubrovnik campus. The basic research question was: What is the empirical basis for classifying students into homogeneous groups?

It is no surprise that current organizations are fighting to determine the magic formula for how to succeed in the long run. The business environment is more competitive than ever. The rate of change is causing us to discard any unnecessary behaviours or characteristics while focusing only on those competencies that will bring us long term success. Companies want to get the best from their workforce and, if possible, from the moment they get hired.

One particular type of leaders in recent times seems to achieve greater motivation and engagement among the workforce, focusing on transformative strength of the organization and relationship building among the employees of an organization (Bass and Riggio, 2006). Transformational Leaders are found to be inspirational and highly effective when it comes to increased motivation and positive outcomes (Bass and Riggio, 2006).

Transformational leaders are creative, energetic, team players. At the very core of the transformational leadership model one can find consciousness – of self and of others. The change towards this type of leadership has to start at the individual level and it should continue to interpersonal relationships and finally to the organization as a whole (Hacker & Roberts, 2003).

Research on transformational leadership can be linked with Big Five personality characteristics (extraversion, agreeableness, conscientiousness, neuroticism and openness to experience) as important predecessors of this particular type of leadership (Lee, 2012).

Big Five personality characteristics have been cross-culturally validated and there is a vast body of research using this model to explore the relationship between personality and leadership (McCrae, Costa, 1987).

The model relies on exploring the five personality traits: extraversion, agreeableness, conscientiousness, neuroticism and openness to experience. Extraversion in this context means “sociable, gregarious, assertive, talkative, and active”, and agreeableness is being “courteous, trusting, forgiving, and soft-hearted”. Conscientiousness refers to “responsible, organized, planful and thorough” while openness to experience describes an individual as “imaginative, curious, original and artistically sensitive”. Neuroticism has been described as having “anxious, depressed, emotional, insecure” tendencies (Barrick, Mount, 1991).

Due to the popularity of personality tests, this study examined the relationship between various leadership characteristics (as projected through the Big Five as a model) and the student population at a college level higher education institution. This research focused on discovering leadership characteristics and existence of patterns and clusters among a diverse student population by applying inductive research methodology from *100 Croatian Leaders* (Samardžija, 2013).

As Baccei (2015) states in his dissertation work, one of the main goals of colleges and universities today is to strive to develop future leaders through careful design of curricular and extra-curricular activities. The college administrators have to be aware of the importance of deliberately choosing as many leadership opportunities as possible so that students can develop in the right direction (Baccei, 2015).

The case in this study can be taken as an example of a higher education institution that tries to do the same: to educate future managers with the right leadership competencies that will make them valuable future employees. In the creation of the curriculum, RIT Croatia is guided by identification of competencies first followed by working on the list of classes to offer second (R.I.T. Greatness Through Difference, 2016). The results of this paper may be used to refine the competencies identified earlier by RIT Croatia administrators.

What types of leaders are being educated at RIT Croatia? Is there a particular type that would be more “suitable” in a given social and cultural environment? A study conducted between Swedish and Croatian leadership styles revealed that there are differences in perception of desirable leadership skills. While Croatian participants rated self-confidence, dominance and fluency of speech as the top three characteristics, Swedish participants reported charisma,

communication and team building as the crucial skills (Kostić-Bobanović and Bobanović, 2013).

Juras (2010) concluded that Croatian managers demonstrated the development of consciousness related to the growing importance of leadership for the success of Croatian business. For Croatia, as a country still in transition, this is an important stage of creating the right opportunities for students to learn about appropriate traits and skills and their ability to match them with the appropriate leadership style.

The personality approach to leadership is only one approach and it may be a limited one. However, this research contributes to the previous body of studies that explored the relationship between traits and leadership development. Andersen (2005) states that previous work has found positive correlations but these correlations were weak.

In leadership development guidebook, Seemiller (2013) clearly makes a case that any institution of higher learning that wants to adequately prepare students for successful future careers has to understand the competencies that are a must for achieving effectiveness at work. Thus, students must be familiarized with the process and language of competencies before entering the workforce.

After providing the preceding brief literature review associated with leadership styles and personality traits, the paper will first continue with a description of the methodology employed to understand students' leadership qualities and personality traits. Following this, results of the study's survey and an associated discussion will occur. Finally, concluding remarks are presented.

2. METHODS

This paper would like to produce research outcomes that are useful in education and that will later have a practical impact on real-world organizations. In particular, this paper was interested in characteristics that RIT Croatia students value the most. The basic research question was: What is the empirical basis for classifying students into homogeneous groups? In order to answer the research question, four cluster analyses were conducted:

1. Cluster analysis of students according to The Big Five Model of Personality
2. RIT Croatia Leadership characteristics cluster analysis
3. Cluster analysis of confirmation of personal success
4. Career development cluster analysis

Associated with this research is the null hypothesis: There is not a correlation between leadership characteristics among an undergraduate population and two demographic variables: number of siblings and place of growing up (city, small place, and large city).

Participants: There were 134 participants, students from RIT Croatia's Dubrovnik campus, in total recruited through a combination of face to face distribution of questionnaires and an online distribution of the same questionnaire via Google form. Out of the 134 completed questionnaires, 127 questionnaires were valid: 29 Freshmen (22,8%), 27 Sophomores (21,3%), 37 Juniors (29,1%) and 34 Senior students (26,8%). Gender distribution among participants was almost equal: 62 (48,8%) female and 65 (51,2%) male.

Materials: The questionnaire consists of 18 different type of questions helping one better understand leadership characteristics, but also obtaining a greater awareness of characteristics that would make students excel in their future careers as leaders. The first part of the questionnaire was based on The Big Five Model of Personality (Cronbach's Alpha $\alpha = .69$), but the principal research method was a leadership questionnaire that consists of 42 traits created by professor Samardžija using inductive research methodology applied to 100 Croatian leaders' interviews (Samardžija, 2013) (Cronbach's Alpha $\alpha = .93$). The questionnaire contained a list of characteristics in semantic differential form. The participants were asked to circle a number from 1-7 on a Likert scale that corresponds to their level of identification with the anchors' stated characteristic (personality trait). Further questions investigated student attitudes about important components for career development, opinions about success, and individual claims based on confirmation of personal success. The remaining questions in the questionnaire were used to create demographic profiles of students.

Procedure: Using descriptive adjective pairings and a 7-point Likert scale, students first self-reported aspects of their personalities based on twenty-five traits associated with the Big Five Model of Personality which categorizes traits into five dimensions of Extraversion, Agreeableness, Openness, Conscientiousness, and Neuroticism (Lussier and Achua, 2001). The principal research method was the leadership characteristics, career development, and personal success questionnaire created by applying inductive research methodologies to 100 Croatian leaders' interviews (Samardžija, 2013). Participants were instructed to self-report their standing in regards to 42 descriptive adjective pairings of personal leadership characteristics, as well as their attitude towards career development, and confirmation of their personal success.

3. RESULTS AND DISCUSSION

Based on The Big Five Model of Personality the first cluster analysis generated three homogenous groups of students. The basis for the second cluster analysis was leadership characteristics of RIT Croatia students. The third cluster analysis depended on what represents confirmation of personal success. The final, fourth, cluster analysis was based on the subjective dimension of career

development expectation. All four cluster analyses produced three distinct clusters.

3.1. Cluster Analysis of Students According to the Big Five Model of Personality

Based on The Big Five Model of Personality, the first cluster analysis generated three homogenous groups of students (Table 1).

Table 1
Cluster analysis of students according to The Big Five Model of Personality

		Cluster 1 Emotional- extroverts	Cluster 2 Self- satisfactionists (Smugs)	Cluster 3 Creative perfectionists
Gender		Female	Female	Male
Year of college		2 (sophomore)	3 (junior)	3 (junior)
BIG FIVE CHARACTERISTICS Opposing adjectives		Scale 1 2 3 4 5 6 7		
Down to Earth	Imaginative	3	2	4
Careless	Careful	4	3	5
Soft Hearted	Ruthless	3	6	5
Rude	Courteous	5	5	5
Aloof	Friendly	5	5	6
Narrow Interests	Broad interests	4	6	5
Disorganized	Well organized	5	6	5
Forgiving	Vengeful	2	5	6
Self-pitying	Self-satisfied	5	6	6
Self-disciplined	Weak Willed	3	6	5
Callous	Sympathetic	5	3	5
SUM %		23,5%	12,6%	63,9%

Source: Authors' research

The first cluster, the Emotional-extroverts, account for 23.5% of the student sample. This cluster is predominately female and, notably, is the youngest of the sample, and displays the broadest set of liberal ideals, being markedly more forgiving and soft-hearted than the other clusters. Additionally, in their interactions with others, they see themselves as largely courteous, friendly, and sympathetic. In their relationship with the broader environment, they self-report as being down-to-earth and having a number of interests. When pursuing their interests, this cluster is well organized, disciplined and satisfied. In sum, this cluster extends a receptive and engaging hand to the world while purposefully exploring their interests.

The second cluster, the Self-satisfactionists, is the smallest at 12.6%. This cluster is also largely female, but slightly older. Like the Emotional-

extroverts, they are down-to-earth, but, in a stark difference, are much less considerate of others, viewing themselves as ruthless, and somewhat vengeful and callous. In an apparent contradiction, this cluster is, at the same time, friendly and courteous, suggesting that this cluster is accepting of those that they are comfortable with but, at the same time, harsh with those whom they disagree with. When considering what intrigues them, this cluster states that they have broad interests and are well organized in their pursuit of them and are satisfied with their efforts. Overall, this cluster is interested in much of what is around them, exploring various pursuits in a purposeful fashion, and is discerning with whom they interact, being warm with some and dismissive of others.

The third cluster, the Creative-perfectionists, at 63.9%, is the largest cluster. This cluster is largely older and, distinct from the first two clusters, is predominately male. Also unique from the other two clusters, this cluster is less grounded, stating that they are more imaginative and careful, suggesting that they have a day-dreamer aspect to themselves, envisioning new things but at the same time not being aggressive in enacting them. Otherwise, the Creative-perfectionists are much like the Self-satisfactionists, being ruthless, vengeful, and callous while at the same time acting in a friendly and courteous manner. However, this cluster is more sympathetic than the Self-satisfactionists. Not surprisingly, this imaginative cluster does not stay focused, being weak-willed, and having broad interests. Somewhat remarkably, this imaginative and weak-willed cluster is able to, once they have settled on area of interest, act with a certain level of organization.

3.2. Leadership Characteristics of RIT Croatia Students

3.2.1. Top Ten RIT Croatia Students Leadership Characteristics

A descriptive analysis of the sample based on Samardžija's (2013) work was conducted in order to reveal their top ten leadership characteristics (Table 2). A set of 42 characteristics based on inductive research of 100 interviews of Croatian leaders (Samardžija, 2013) were used in the second portion of the questionnaire.

Table 2

Top ten student leadership characteristics

Rank	Student leadership characteristics	Mean	Std. Deviation
1.	Learns from mistakes	5,93	1,267
2.	Ambitious	5,84	1,322
3.	Success oriented	5,79	1,258
4.	Always improving skills	5,75	1,211
5.	Considers „the big picture“	5,74	1,244
6.	Moral	5,67	1,241
7.	Competent	5,64	1,173
8.	Competitive	5,55	1,367
9.	Positive attitude	5,54	1,552
10.	Knows how to motivate others	5,51	1,253

Source: Authors' research

When examining the top ten leadership characteristics of the sample, one immediately notices that student related characteristics are strongly represented. Being students, seeking to increase their knowledge and obtain career enhancing skills, it is to be expected that they learn from their mistakes, are ambitious and success oriented, and are looking to improve their skills. While acquiring skill sets and knowledge, this sample has a strong psychological make-up that should increase their chances of success, being moral, competent and competitive while possessing a positive attitude. Finally, the sample is showing signs of looking beyond themselves and considering how they will fit in with their environment, stating that they know how to motivate others.

Generation/year based differentiation of Leadership characteristics of RIT Croatia students as applied to the 42 leadership characteristics are found in Table 3, showing that seniors are significantly different than first, second and third year students in that they do not mind it when their decisions are questioned (Does not like it when decisions are questioned by others - Does not mind when decisions are questioned by others pairing). Seniors are significantly different than other students in two other characteristics. First, seniors report themselves as being more competent than do other students (Incompetent – Competent pairing). And second, seniors view themselves as more proactive than do other students (Inert – Proactive pairing).

Table 3

Generation/year based differentiation of leadership characteristics of RIT Croatia students

Leadership characteristics	CC	Asy. Sig.	p-val	df	Freshmen	Sophomores	Juniors	Seniors	SUM
Does not mind when decisions are questioned by others	.517	.010	.021	18	30%	27%	8%	34%	100%
Competent	.006	.007	.006	15	30%	27%	8%	34%	100%
Proactive	.493	.039	.006	18	30%	27%	8%	34%	100%

Source: Authors' research

Gender based differentiation of leadership characteristics of RIT Croatia students is shown in Table 4, revealing female students to be more focused, proactive, influential and willing to admit mistakes at a statistically significant level.

Table 4

Gender based differentiation of leadership characteristics of RIT Croatia students

Leadership characteristic	CC	Asymp.Sig.	p-val.	Df	Female	Male	Sum
Focused	.363	.013	.001	6	50.5%	49.5%	100%
Proactive	.351	.042	.023	6	50.5%	49.5%	100%
Influential	.332	.038	.022	5	50.5%	49.5%	100%
Admits mistake	.327	.044	.015	5	50.5%	49.5%	100%

Source: Author's research

3.2.2. RIT Croatia Leadership Characteristics Cluster Analysis

The basis for the second cluster analysis was leadership characteristics of RIT Croatia students (Table 5).

Table 5

RIT Croatia Leadership characteristics cluster analysis

Variables		Cluster		
		1. Prime future leaders	2. Optimal future leaders	3. Non leaders
Opposing adjectives		Scale	1 2 3 4 5 6 7	
Immoral	Moral	6	5	3
Unscrupulous	Conscientious	6	5	3
Quitter	Persistent	6	5	3

Inconsistent	Consistent	6	5	3
No luck	Lucky	5	4	3
Unfocused	Focused	6	4	4
Negative attitude	Positive attitude	6	5	2
Talentless	Talented	6	5	2
Uncompetitive	Competitive	6	5	3
Inert	Proactive	6	5	3
Has no eye for business opportunities	Has an eye for business opportunities	6	5	3
Incompetent	Competent	6	5	3
No empathy	Full of empathy	5	5	3
Not success oriented	Success oriented	6	5	3
Unambitious	Ambitious	6	5	3
Risk-averse	Risk-taking	6	5	3
Insincere	Sincere	6	5	3
Suspicious	Trusting	5	4	3
Non influential	Influential	5	5	3
Does not know how to motivate others	Knows how to motivate others	6	5	4
Non-genuine	Authentic	6	5	3
Non inventive	Innovative	6	5	3
Willing to have a monologue	Willing to have a dialogue	5	4	3
Does not admit mistakes	Admits mistake	6	5	3
Does not like it when decisions are questioned by others	Does not mind when decisions are questioned by others	5	4	3
Unprincipled	Principled	6	5	2
Not improving skills	Always improving skills	6	5	4
Doesn't track competitors' actions	Tracks competitors' actions	6	4	3
Non-profit oriented	Profit oriented	6	5	3
Unintuitive	Intuitive	6	5	3
Does not learn from mistakes	Learns from mistakes	6	5	4
Does not consider „the big picture“	Considers „the big picture“	6	5	3
Lazy	Hard-working	6	4	2
Not concerned about social inequality	Concerned about social inequality	6	4	4
Physically aggressive	Physically non-aggressive	6	5	3
Not physically active	Physically active	6	5	4
Does not plan strategically	Plans strategically	6	5	2
Improvises	Plans short-term	4	3	3
SUM	% of participants	63%	36%	4%

Source: Author's research

When considering the presence of Samardžija's (2013) leadership characteristics among the sample, cluster analysis reveals three distinct clusters based on 38 leadership characteristics. Encouragingly, the first cluster, Prime Future Leaders, those respondents who most strongly report to possess leadership characteristics, are the largest group, making up 63% of the sample. Impressively, this cluster has a score of six (on a 7-point Likert scale) on 31 of 38 (81.6%) of the relevant characteristics. The remaining seven characteristics have six scores of five and one four (on a 7-point Likert scale) on the improvising as opposed to planning characteristic. But this score, in and of itself, should not be seen as a negative for the cluster as the decision making process is contextual in that those situations that are uncertain or highly uncertain require more improvising than more certain situations that can be addressed through a more structured approach (Sarasvathy, 2008). Across the board, then, these individuals, based on Samardžija's (2013) work, are well positioned to become leaders. They are willing to take risks, are dedicated and hard-working, want and seek to improve themselves, and are emotionally intelligent.

The second cluster, Optimal Future Leaders, is also well represented, comprising 36% of the sample. These individuals largely score one point less (on a 7-point Likert scale) on the leadership characteristics than the Prime Future Leaders, and are thus also well positioned to become leaders. Note that for no single characteristic does this cluster rate itself higher than the Prime Future Leaders do, and only equates itself with the Prime Future Leaders in two characteristics: full of empathy and influential. Additionally, the largest differences (a score of two on a 7-point Likert scale) between this cluster and the Prime Future Leaders are found in four characteristics: focused versus not focused; tracks the competitors' actions versus not doing so; hard-working versus lazy; and concerned about social equity versus not being so. These four differences are indicative of the Prime Future Leaders relative advanced position. Being more focused and hard-working, the Prime Future leaders have a greater level of drive and determination as reflected in their higher scoring in the other characteristics. And this edge further operationalizes itself in that Prime Future Leaders are more aware of their surroundings both in terms of what competitors are doing as well as the overall general welfare of society.

The third cluster, Non-leaders, only make up 4% of the sample. This group exhibits markedly unimpressive leadership characteristics with their highest score being four (on a 7-point Likert scale) and this occurs in just six characteristics: knows how to motivate others; always improving skills; learns from mistakes; physically active; concerned about social inequality; and focused. And in these last two characteristics, Non-leaders, in their best showing against the other two clusters, match the scores of the Optimal Future Leaders but not the Prime Future Leaders. It is instructive to recognize that the Non-leaders do not outscore the other two clusters in any characteristic. As for the other 32 leadership characteristics, Non-leaders recorded scores of three with the exception of five characteristics that have a score of two: positive attitude; talented; principled; hard-working; and plans strategically. These five poorly scored characteristics aptly capture the overall poor scoring of this cluster. As they are not

hard-working, lack talent, positive attitudes, and principles, the scores in the other characteristics are not surprising. They do not have great potential to become leaders.

3.3. What Represents Confirmation of Personal Success?

The majority of students, 57%, choose success to be defined as: Success is when one does what one loves, goes to work happy with a smile on one's face, and is able to maintain a balance between satisfying one's own needs, family needs, and health and societal needs.

Additionally we have conducted the third cluster analysis which depended on what represents confirmation of personal success (Table 6).

Cluster analysis of student ranking of components that they see as confirmation of success generated three homogeneous clusters: Moderates, Capitalists and Sociocapitalists. The first cluster, Moderates, comprise 33.6% of the sample and are, as their name suggests, moderate in their expectations of success. They consider the amount of money they make to be important, but only to the extent that this wealth will allow them to have good health and provide a college education for their children. Material goods such as homes and cars are not important to them nor is media recognition. Likewise, they have little interest in influencing public policy and they do not express an interest in leaving their mark of society, making the world a better place overall. The level of employee satisfaction, however, is one externally oriented (viewable to the world) characteristic that is moderately important to this cluster.

Table 6

RIT Croatia Leadership characteristics cluster analysis

VARIABLE/question content	Cluster 1 MODERATES	Cluster 2 CAPITALIST	Cluster 3 SOCIO- CAPITALIST
Confirmation of my personal success is:	Not important	1 2 3 4 5 6 7	Very important
The amount of money that I have earned	5	6	4
Recognition by high society	4	6	3
A satisfied team of employees	5	6	6
Being part of government policy formation	3	5	2
The number of cars that I have	2	4	1
Having good health	6	7	7
Being able to actively play and engage in sports	4	6	6
Leaving a positive mark on society; making the world a better place	4	6	6
Enabling my children to obtain a college level of education	6	7	6
SUM of respondents n=122	41	42	39
Percentages	33.6 %	34.4%	32%

Source: Author's research

Capitalists, the second cluster, make up 34.4% of the sample. Much like the Moderates, this cluster views money earned as confirmation of their success, using income to ensure good health and college educations for their children, but, unlike Moderates, they seek external validation of their success as exhibited by their desire to be recognized by high-society, mentioned in media, involved in public policy formation, and recognized for having satisfied employees. Moreover, more than the other two clusters, they view possession of material goods as confirmation of their success, rating the amount of real estate they own as somewhat important. Lastly, perhaps as an expression of their wealth and general level of success, this cluster wishes to actively engage in sports, signalling to the world that they are well-rounded individuals.

The third cluster, Socio-capitalists, represent 32% of the sample. This cluster is distinct from the other two in that it exhibits a clear lack of interest in any real material or worldly recognition or display of their success. As such, this cluster is not interested in owning properties and cars (giving these item the lowest possible score), and does not wish to be acknowledged by high-society, mentioned in media, or associated with government policy formation. Furthermore, this cluster shows indifference towards the amount of money, scoring four on a 7-point Likert scale in this characteristic. What does matter to this cluster in terms of success is to be noticed for positively contributing to society, wishing to be credited with leaving a positive mark on society as well as having satisfied employees. Like the other two clusters, Socio-capitalists want to have good health and the ability to provide their children with a college education.

3.4. Subjective Dimension of Career Development Expectation

The final, fourth, cluster analysis was based on the subjective dimension of career development expectation. Based on cluster analysis of student ranking of components they see important for their career development, three homogeneous groups were identified: Careerists, Certaintists and Balanceists (Table 7).

Careerists, the first cluster, at 61.2%, is the largest cluster. As its name suggests, this cluster shows the strongest interest in pursuing a career as well as being recognized for it. Of the seventeen items in this cluster, Careerists have a score of six (on a 7-point Likert scale) on fourteen items, one score of five and two scores of seven. Notably, the other two clusters do not score higher on any of the seventeen items. Careerists express a strong desire to be able to grow within an organization, build or create something within a firm, and maintain autonomy at the same time. And these Careerists want affirmation of their accomplishments in the form of money as well as social standing.

Table 7

Cluster analysis of student ranking of components that they see important for their career development

VARIABLE/question content	Cluster 1 CAREERISTS	Cluster 2 CERTAINTISTS	Cluster 3 BALANCEISTS
For development of my career, it is important:	Not important 1 2 3 4 5 6 7 Very important		
To be (stay) in a company older and more experienced than myself	5	4	4
That my superior gives me a chance for self-affirmation and that he believes in me	6	4	6
That I specialize and develop in my field of expertise	6	4	5
That I have a clear wish to climb the corporate ladder	6	4	5
To have an opportunity to create a new entity (organization) as well as to develop new products or services	6	4	5
That I have autonomy and independence – I can work my way at my pace, according to my personal standards and conditions and within my personally defined time frames	6	4	6
That I have a sense of safeness/stability – that I feel safe and financially secure	6	4	6
That I integrate my professional life and career with my personal life and future family needs – life balance matters	6	3	6
That I make the world a better place, improving and serving society	6	3	5
That I overcome impossible obstacles; that I solve unsolvable problems or achieve victory over strong competition	6	3	5
That I love my job and profession	7	4	7
That I use all of my special talents	6	4	6
That my job gives me an opportunity to be financially well-off	7	4	6
That my job provides me with high social status and prestige	6	4	4
That my job gives me numerous opportunities to work with people	6	4	5
That my job gives me the option to lead and manage others	6	3	5
SUM of respondents n=116	71	12	33
	61.2%	10.4%	28.4%

Source: Author's research

Despite seeking great advancement in their careers, this cluster also strives to maintain a certain balance with their surroundings: they desire safety, a balance between work and family, and the chance to improve society. To be given the chance to face challenging situations, to be able to triumph, to be rewarded for their efforts, and to be able to do so while maintaining balance in their lives while helping society: these are the characteristics of the Careerists.

The second clusters, Certainists, the smallest group, account for only 10.4% of the sample. This group is starkly different than the other two clusters in this analysis, recording a high score of four (on a 7-point Likert scale) on any of the seventeen items describing this cluster analysis. In fact, Certainists have a score of four on thirteen of the items and three on the other four items. They are strictly 'in the middle of the road'. None of the seventeen items excites them one way or the other. They express no wish to excel in terms of developing themselves in a field of interest, receiving status of any type, or excelling. This cluster, apparently, has yet to determine what they want in terms of career development. They have yet to find their way.

The final cluster, Balanceists, comprise 28.4% of the sample. This cluster largely mirrors the Careerists, but with less conviction. Accordingly, for the most part, this cluster either matches the Careerists' scores on the seventeen items or scores one point less. Thusly, Balanceists too seek the opportunity to grow and excel in their careers, face challenges and overcome them, and be acknowledged for their efforts and successes. The strongest difference between Balanceists and Careerists is found in the receipt of social status and prestige item, scoring two points less. This cluster, then, values and seeks the same things as do the Careerists, only slightly less so.

4. CONCLUSION

Using cluster analysis, this research empirically describes four different approaches of viewing aspects related to leadership of a college student sample in a transition economy, each approach uncovering three clusters: using The Big Five Model of Personality (Emotional-extrovert, Self-satisfactionist, and Creative-perfectionist clusters); based on Samardžija's (2013) inductively determined leadership characteristics of transition economy leaders (Prime Future Leader, Optimal Leader, and Non-leader clusters); what represents confirmation of personal success (Moderate, Capitalist, and Socio-capitalist clusters); and components that students deem important for their career development (Careerist, Certainist, and Balanceist).

This paper's null hypothesis, that there is not a correlation between leadership characteristics among an undergraduate population and two demographic variables - number of siblings and place of growing up (city, small place, and large city), was accepted. There was, however, a significant difference

between students who changed their place of residence in comparison to those who continued to reside in their place of birth.

The majority of students, 57%, choose success to be defined as: Success is when one does what one loves, goes to work happy with a smile on one's face, and is able to maintain a balance between satisfying one's own needs, family needs, and health and societal needs.

Interestingly, students show a clear preference for a certain cluster in three of the four analyses, with the exception being the analysis pertaining to personal success having an almost equal distribution of its three clusters. In the other three cluster analyses, the largest cluster, at a minimum, represents 61.2% of the sample, suggesting a level of homogeneity among the student population. Additionally, in these three analyses, the second largest clusters make-up 23.5% to 32%, leaving the third and final cluster ranging from 4% to 12.6%.

When looking at the largest clusters in the aforementioned three cluster analyses, one senses that students, using Samardžija's (2013) inductively identified leadership characteristics found in a transition economy and the Big Five Personality traits, are well positioned and prepared to become leaders.

First, based on the Big Five Personality traits, students are Creative Perfectionists, being interested in an array of interests that they engage in an organized and relatively imaginative fashion. Moreover, they are to the point. Their responses suggest that they have limited tolerance for some while, at the same time, are sympathetic to others. This dichotomous attitude may serve them well as they navigate uncertain waters in a transition economy, allowing them to harbour their limited resources on only the most promising paths.

Second, according to Samardžija's (2013) transition economy work, this student sample is primarily Prime Future Leaders. As such, they are risk-takers and innovative while considering the big picture, positive and proactive, competitive and ambitious, and talented and persistent. At the same time, they are willing to admit to mistakes and learn from them, and to have dialogues. And they interact with the world in an authentic and empathetic fashion. In sum, they embody characteristics empirically shown to allow for success in an uncertain transition economy (Samardžija, 2013).

Third, when considering elements critical for career success, the student sample is found to act as Careerists. Careerists are critical to the success of transition economies in that they provide two direct benefits to the economy. In the first sense, these Careerists are interested in success. They want to both make money, strengthening the economy, as well as leaving a positive mark on their societies, making them countries a better place. In the second sense, they seek social recognition of their success in the form of recognition by society and prestige. This active and visible recognition increases the overall social acceptance of successful business people. Social norms, then, are altered to

support and encourage their activities. These altered social norms can lead to increased levels of similar activity of others (Walker, Jeger, & Kopecki, 2013).

The fourth cluster analysis, pertaining to confirmation of personal success, as previously mentioned, produced an almost equal distribution of clusters. All three of these clusters are in relative agreement in three areas: the desire to have a satisfied team, good health, and the ability to provide their children with a college education. But in other areas, students are indecisive. It would seem, then, that students have yet to determine how they wish to express and use their success.

Additional analyses were conducted on the sample as a whole, looking for the most prevalent leadership characteristics, as well as generational and gender differences. Predictably, the sample possesses leadership characteristics that one would expect to find in college students: ambitious, success oriented, competitive and competent. From a gender standpoint, females were found to be more focused, proactive, influential, and willing to make mistakes. When considering generational differences, seniors, potentially resulting from their greater schooling and experience, find themselves to be more competent, proactive, and willing to accept criticism of their decisions.

It would appear, based on this sample's responses, that the design of the curriculum and accompanying extra-curricular activities has achieved one of R.I.T.'s stated objectives, as previously mentioned, of creating desired leadership competencies that will make students valuable future managers / leaders. R.I.T.'s founding principle of providing students with a blended education set that provides a theoretical framework paired with practical applications, according to this study, has convincingly produced leadership minded individuals.

Limitations and future research

Note that various constraints limited this research to a single private college, limiting the research in two ways. First, the sample size could have been larger. And, second, public universities were not included, potentially creating a sample that was not fully representative of Croatia's predominately public higher education institutions. As such, this research should be expanded to include a number of public entities as well as additional private schools. If, in fact, this study's sample is found to be in the minority of all (the country's) higher education students, then their potential positive impacts may be muted or washed out by the larger group of other students.

It would be interesting to learn how these positively positioned future leaders develop over time as they immerse themselves in their careers. Do they build upon their existing leadership foundations, or do they for some reason or another falter, becoming less leadership oriented?

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STUDENTSKO VODSTVO, RAZVOJ KARIJERE I PROFILI OSOBNOG USPJEHA

Sažetak

Glavni cilj ovog empirijskog istraživanja bio je utvrditi prevladavajuće osobine vođe i ponašanja kod sve četiri generacije studenata preddiplomskog studija na američkom koledžu RIT Croatia u Dubrovniku. Osnovno istraživačko pitanje bilo je: „Koja je empirijska osnova za razvrstavanje učenika u homogene skupine?“ Prvi dio upitnika temelji se na značajkama Big Five modela osobnosti, ali glavna metoda istraživanja bio je upitnik za istraživanje osobina vođe, razvoja karijere i osobnog uspjeha, sastavljen primjenom induktivnih metodologija istraživanja na 100 intervjuja hrvatskih vođa. Da bismo odgovorili na postavljeno istraživačko pitanje, provedene su četiri klaster analize. Nulta hipoteza da nema povezanosti između osobina vođe među studentima preddiplomskog studija i demografskih varijabli (broj braće i sestara, mjesto odrastanja - grad, malo mjesto i veliki grad) potvrđena je. Temeljeći se na Big Five modelu osobnosti, prva klaster analiza pokazala je tri homogene skupine studenata. Osnova za drugu analizu klastera bila je osobine vođe studenata RIT Croatia. Treća klaster analiza ovisila je o tome što predstavlja potvrdu osobnog uspjeha. Konačna, četvrta klaster analiza temeljila se na subjektivnoj dimenziji očekivanja razvoja karijere. Sve četiri klaster analize rezultirale su trima različitim klasterima.

Ključne riječi: osobine vođe, razvoj studenata, profil studentskog vodstva, razvoj karijere, osobni uspjeh.

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A NOVELTY MODEL OF ONLINE ACCOMMODATION PRESENTATION AND DISCOVERY

UDK / UDC: 338.48:004.738.5

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Abstract

Extreme expansion of digital technologies and social networks in recent years has had a huge impact on the travel market and online tourism. Along with the digitalization of tourism and travel business, every day more and more accommodation bookings take place online. Most popular online travel web sites are commonly charging provision for the accommodation booking and don't allow direct contact with the accommodation owners. Today tourists demand more for their money, so they are more likely to find information about their travelling destination on social networks and on destination local web sites. Recent studies also show a growing trend in online bookings through the direct contact with hotels or private accommodation owners. In this paper, we present a new model for online accommodation presentation and discovery. The first novelty in our approach is in the direct contact between the guest and accommodation owner. The second one is that the booking process is free of charge, 0% commission to the owner and to the guest. As a starting point in the

development of web and mobile application based on our model we took the habits of the target group, which makes the decision for accommodation on the basis of photos, free Wi-Fi and the price.

Keywords: mobile application, online travel, startup, tourism, accommodation

1. INTRODUCTION

This paper aims to demonstrate the potential and possibilities of innovative technology solutions to improve the customer experience, as well as a significant reduction in the cost of a modern online passenger. Our approach is based on the direct contact between accommodation owners and guests, and 0% commission for the booking service, both for the owners and for the guests.

Proposed model named Spotie has a modern approach and it is developed with the intention to investigate repetitive and scalable business models with global ambitions and global potential. It is aimed to the business users and to the end users, in this case for the owners of private and hotel accommodation, and guests who use their services. Business-to-Customer service (B2C) involves an organization business activity with end users. Sales of services to end users over the Internet are a basic feature of B2C economy. In the tourism sector, this approach is also called sharing economy. The advantages of this method for planning travel are visible at a first glance: saving time, offering much greater choice and requiring less time for researching alternatives.

What the tourism sector on the Internet differs from other similar B2C solutions is that online booking, often does not save any money, because the prices on many web portals are slightly higher than the prices of the same services on their real locations in the real world. The elimination of intermediate steps and costs in the value chain could significantly lower the cost of travel.

Rapid development of mobile devices and smartphones has irrevocably changed the way guests are planning their holidays. Potential use of mobile devices and smartphones in travel and tourism industry, as well as their impact on potential customer groups is discussed in (Portolan et al., 2011). Recent studies have shown that 51% of travellers have used their smartphone to make accommodation booking, while 47% of them booked flights with their smartphone. This Global Traveller Study (Lorden, 2014) was made on the basis of 4.618 participants. Furthermore, the study shows that 80% travellers take photos with smartphones on their holidays, and 72% use GPS on their phones to find a destination. Nearly all Millennials in the study - 95% use social media for sharing photos, searching for the recommendations and engaging with businesses. In the age group over 50 about 78% also uses social media on their holidays.

2. ONLINE TRAVEL MARKET

Along with the development of digital technologies there is also a rapid development of the online travel market. Every day more and more accommodation and transportation bookings take place on the Internet. Tourist web sites are sites dedicated to tourism and travel. They focus on reviews of tourist destinations, travelling prices or a combination of these two concepts. Online bookings are the largest component of e-commerce, according to Forrester Research. About 70 million users have examined and decided on their travel plans online in July 2006 (Saks, 2006). The transformation of the traditional travel market to the online travel market, as well as from traditional economy to the digital economy can cause impairment of classical structure and organization of the company. Some of the world's largest companies can be taken as an example. The biggest world's taxi company Über does not own any vehicle. World's most popular media Facebook does not create content. The most valuable world's retailer Alibaba does not hold any inventory. Airbnb the world's largest provider of the private accommodation does not own any property.

2.1. The Digital Economy

The digital economy is a new form of economy based on digital technologies (Tapscott, 1997). It is also called the new economy. For most countries digital economy is one of the most attractive growth prospects of their national economy. The presence of digital technologies today has become normal and we see more and more everyday forms in which digital technologies are included in our personal life as well as in our business activities. Digital technologies have become a fundamental element of all efforts for change, but also for the creation of new forms of successful positioning of all participants in the process, from the individual to the country, from global associating to communication in the family, from solutions that are applied locally and those that cover the whole world.

The taxonomy of the digital economy (Bilderbeek, 2013) is shown on Figure 1. Taxonomy is made by experts from METISfiles company, which is engaged in independent market research. This taxonomy represents a wrapper around the classification of industries at traditional economy.

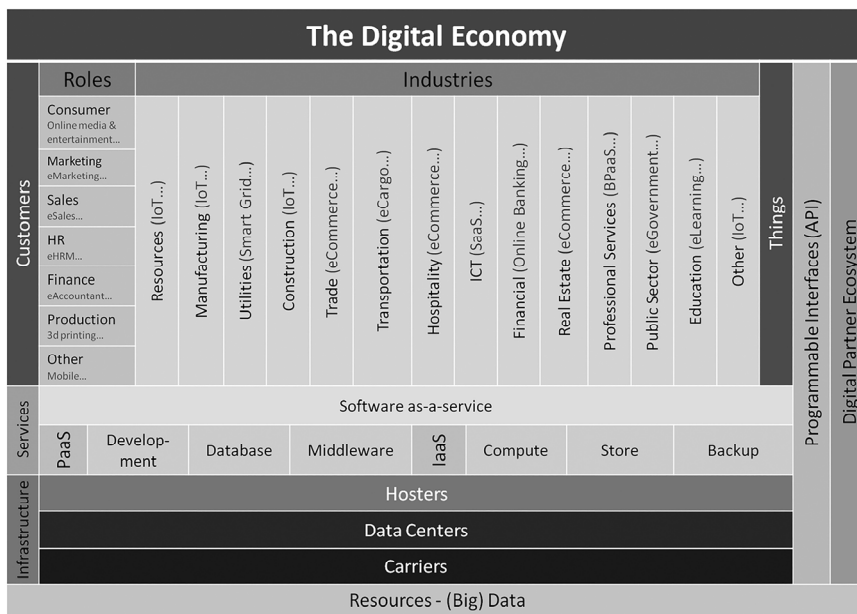


Figure 1 The digital economy taxonomy

Source: Bilderbeek, 2013

Traditional economy is divided into primary, secondary, tertiary and quaternary activities. The digital economy has a similar distribution. In digital economy taxonomy, there are resources in the form of Big Data, infrastructure presented by data carriers, data centres and hosters, services in a form of software (SaaS – software as-a-service), platforms (PaaS – platform as-a-service) and infrastructure (IaaS – infrastructure as-a-service), and clients at the end.

According to the report (Internet Society, 2015) more than 3 billion people around the world are using the Internet. The number of broadband connections in Croatia have reached a number of total 4.195.613 of the latest quarterly report (4th quarter 2015.) of Croatian regulatory authority for network industries (HAKOM, 2015). 986.215 of them are through fixed access communications network, and other 3.209.398 connections via mobile communication networks (UMTS, HSDPA, etc.). Along with the continuous rise in the number of Internet users in Croatia, but also in the whole world, each year has recorded a growth of the digital economy.

European Union strategy Europe 2020 (European Commission, 2010) provides the opening of the 16 million new jobs that will require high qualifications in the European Union by 2020. Given the statistics that says that the annual growth of the digital economy in the European Union by 12% (European Commission, 2014), which is seven times faster than the traditional

sectors of the economy, and that its total value of more than 600 billion euros, we can say that the digital economy equals economy.

2.2. Generation Y (Millennials)

By the 2020, about 50% of the global workforce will be made up of the Millennials, i.e. Generation Y. Millennials are people born between 1982 and 2000 (Howe and Strauss, 2000). This is the first generation to grow up under the influence of technology and for them a virtual world is of equal importance as the one in which they are physically located. Today they are the largest and most diverse generation of the whole human population. By their personal characteristics taken into account they respect society, family and business creativity, and invest in capital much more than the generation before them. As the choice of study programs they usually choose social and applied sciences. With the increasing costs of college enrolment more students are relying on loans to pay for additional education and most of them are exclusively focused on studying, instead of combining work with studying.

Generation Y “owns” the Internet, and has a high purchasing power. Way of thinking of this generation is managing the way to address them. Communication with them requires an extremely high amount of creativity and freshness, because this generation is already used to the incredible speed and flow of information. In the communication saturation they have learned to ignore the information that they are not interested and keep the ones that have informative or educational strength. In addition Millennials appreciate the honesty and accuracy of the presented data. Business transparency is one of the key factors to be taken into consideration when purchasing. Their experience gained by purchasing will share with many friends and colleagues with whom they are in daily contact.

Given the above, it is clear to conclude that the Millennials are not only an integral part of digital economy, but they shape and create the economy of the future. Members of Generation Y expect quick answers to their questions and suggestions because they were raised largely on the new web technologies that include global access and high-speed communications. These principles work also in the context of social networks in which Millennials acquire new friends, have casual talks, and share their lessons learned for certain life situations and seek for the new knowledge and experiences.

2.3. Consumer 2020

Consumer 2020 expects offer of the best options on the market, personalized products and services, as well as continuity upgrading of the same (Joyce, 2010).

It is anticipated that mobile commerce will become the only imperative. Whether it is a contactless NFC technology (Gardiner, 2010) or the use of optional geo locating in order to find targeted discounts, mobile commerce will become a showcase store of the future. Smartphones now use only 32% retails for communication with end customers, and 43% retails believe that by 2020 they will become the most important channel that will overtake stores, computers, call centres and direct mail (MasterCard Inc., 2012).

Instant troubleshooting and individual customer support 24/7 will be necessary in all aspects of commerce. That includes intuitive customer service, pro-active thinking about users' needs, as well as seamless communication through all information channels.

2.4. Digitalization Trends

Big Data is a set of data, whose size is beyond the capabilities of traditional software tools for database to record, store, manage and analyse such data (Gahane, 2013). Big Data does not represent a single technology, but a combination of new and old technologies that help companies to gain effective access to the processed data. Big Data represent the ability to manage large amounts of different data at reasonable speed and in an appropriate time frame to allow analysis of these data in real time.

Further, with the increase of the wearable technology such as Google Glass and other gadgets like smart watches and fitness trackers, the term Internet of Thing (IoT) is entered into dictionaries. IoT is in ITU-T Y.2060 recommendation defined as a global infrastructure for the information society, which enables advanced services by merging the physical and virtual things on the basis of existing things, as well as including interoperable information and communication technologies (ITU-T, 2012). IoT refers to a variety of devices that communicate and share data between each other, in the way that devices operate with each other and make our lives easier.

Industry 4.0 (Kagermann et al., 2013) includes digitalization of concepts and processes in production, a combination of services, industrial automation, new technologies and IoT to make the whole process of production and supply transformed.

Sharing economy (Puschmann and Alt, 2016) is a socioeconomic system built around the sharing of human and physical resources, and includes joint development, production, distribution, trade and consumption of goods and services.

2.5. Online Travel Market Analysis

As a starting point in the analysis of the online travel market, we used study from an international agency specialized in marketing through digital channels in telecommunications, e-commerce, travel and finance, S.T.A.R. Digital Group, which we gained directly on our request as well as permission for using it in our research. The study shows the unique way of online accommodation booking for the average German tourists. The analysis was made on a sample of 20.000 German tourists, which were consciously tracked via cookies, allowing collecting information about their unique way of searching for accommodation. From the study it is easy to conclude that the booking process is much more than just a couple clicks on one website.

Most of the guests start searching on a local website, expecting recommendations and advises of local experts. After that they visit web search engine and search for the next relevant local portal where they can find more information about the desired destination and its tourism offer. Among several local portals, one step is visiting the social network Facebook, where they seek advice from friends, or even acquaintances from the desired destination. Rarely, but nevertheless they decide to add a local consultant as a friend for sending him direct inquiries. Next social networks after Facebook in the process of exploring destination are Instagram and YouTube, because they are rich with visual media content, unique photos and videos from the selected destination. Another brief overview of local media web pages and they move on to the website for online booking. By the end of the booking process, the average German guest is manoeuvring between the local media websites and the online booking site. There are several reasons for it. Guests are comparing prices from the local forums, blogs and media with those on online booking websites for finding the best offer. Also, based on the recommendations they decide for them calmer or more compatible suburbs, which results in changing search queries. Third, but the most important for our analysis, they are seeking direct contact with hotels and private accommodation owners. In that purpose they use a combination of local media websites, the Google web search engine and web pages for online booking which are blocking transparent communication prior the payment.

By its approach, this study has confirmed the fact that even 25% of all bookings are done by direct contact, and pointed out the opportunity of making the web and mobile application of this type. For application is conveniently to be positioned at any stage of a unique path of online booking. The ideal would be at the beginning (for a quick overview of the offer), in the middle (at the time of making decisions) or at the end (when the booking is realized).

3. RELATED SYSTEMS

Most popular and best known world online systems that are offering online accommodation presentation and discovery are: Airbnb, Booking.com and TripAdvisor. All three systems are based on taking commissions for accommodation booking.

3.1. Airbnb

Airbnb is a website for the people who rent and for the people who are looking for accommodation. It contains more than 2 million accommodation units in more than 34.000 cities in more than 190 countries around the world, and more than 60 million guests have reserved accommodation through their system (Airbnb, 2016).

Users must register and create their personal profile before using the site. Each accommodation unit is connected to the private profile that includes other user advices, reviews and enables the exchange of messages between users.

Company Airbnb Inc. was founded in 2008 as a startup company. In July 2011, Airbnb has collected \$112 million investment from investment funds: Russian Internet investor DST Global, General Catalyst and Andreessen Horowitz (Austin, 2011). Additional \$450 million they have collected in April 2014 from TPG Capital Group, and are estimated to be worth a total of \$10 billion (Spector et al., 2014). The company received new investments in March 2015, and the value of the company increased to more than \$20 billion (Clampet, 2015). After finalizing one of the biggest private-funding rounds, raising \$1.5 billion in 2015, the value of a company is estimated at \$25.5 billion (Demos, 2015).

Airbnb is direct competition to our model by their system mode and by enormous sums of investment. It is hard to overcome them on the online travel market because of their strong community. However, considering that their system works with high commissions (3% - 18%) and takes a large fee for each booking, there is a chance for the new application of online accommodation presentation and discovery without commission. In addition, communication between users on Airbnb is very limited before they realize payment for the booking. Airbnb is censoring postal addresses, phone numbers, links to accommodation websites, as well as the names and surnames of the accommodation owners. This hardens the communication that is not completely transparent, and slows down the process of the booking, because users have to make a lot of steps in the payment process before open communication with accommodation owners.

Payment prior communication also prevents Airbnb system to enable voice calls between guests and accommodation owners, for which our model has great intentions in the future, as it would many times speed up communication and booking of accommodation.

3.2. Booking.com

Booking.com with its brand is still the leader in the online travel market, mostly because they started the system in 1996, but also because their name represents booking, apropos booking.

Currently their system has over 908.000 active units in 223 countries and territories around the world, with over 1 million bookings on a daily basis. Booking.com is available in more than 40 languages (Booking.com, 2016). Because of the big expansion and rapid growth of Airbnb in November 2015 Booking.com for the first time released a report with a number of bookable rooms in their system. The total number of 21 million rooms is identified as 14.4 million bookable hotel rooms, 1.8 million bookable holiday rental rooms and 4.8 million bookable rooms in other unique categories of places to stay (Cafferty, 2015). In the same report they stated that in the last 12 months accommodation rentals on their system have increased by 66%, accommodating 285 million guests and over 1 billion guests since their inception.

Considering the years they held a monopoly on the online travel market, they were not heavily invested in the modernization of their product. Just in 2014 Booking.com appeared in the form of mobile application. This fact, as well as that Booking.com lack social integration and the implementation of communication tools between accommodation owners and guests, helped Airbnb for slowly catching them up and taking over the online travel market.

Given that Booking.com also has a high commission (15% for the accommodation owners) new application of online accommodation presentation and discovery without commission has an excellent opportunity to attract a variety of users from Booking.com system. On the other hand, the new application will very difficult go through the marketing “curtain” considering that Booking.com only to Google advertising is investing millions of dollars a year.

3.3. TripAdvisor

TripAdvisor is a website that provides users access to travelling related content reviews and interactive travelling forums. It has more than 6.5 million properties and businesses in over 136.000 destinations, which includes 775.000 holiday rentals and 1 million hotels, B&Bs and other specialty lodgings (TripAdvisor, 2016).

The entire website is based on content created by users, which is sometimes very good, for example, when you get real and honest advices from local people. But quite often it is bad because the owners of local businesses and attractions with false accounts write fake positive reviews. On the TripAdvisor’s side, it is very difficult to maintain and control which reviews are false and which are not.

TripAdvisor has only 3% commission on the bookings, but it continues to block completely transparent communication between accommodation owner or providers of tourist services and the guests. New application of online accommodation presentation and discovery without commission can use TripAdvisor as a strategic database and gradually collect users, especially in the future when newer version would support the advertising of tourist services.

3.4. Problems of Renting Private and Hotel Accommodation

As shown in the overview of the most popular and best known world online systems that are offering online accommodation presentation and discovery, every accommodation owner is faced with high commissions from 3% to 18%, which costs them every year several thousand euros. Some systems in addition to taking a commission from the accommodation owners, are also taking commission from the guests. At Booking.com commission is 15% to the accommodation owner, Airbnb depending on the amount of the transaction takes 3 – 18% from the accommodation owner and from the guest, while TripAdvisor takes 3% both, from the guest and from the accommodation owner.

Furthermore, guests' habits have changed and most of our target audience, especially the younger population, so called Millennials, makes decisions during the trip and choose appropriate accommodation on the basis of photos, free Wi-Fi and prices. Also, more and more booking system users use last minute bookings, because they know that there is a plenty of accommodation available for booking on the Internet.

The next problem that appears on the online market of private and hotel accommodation is the impossibility of direct contact with the owner or agent of the property. Guest to come into contact with the hotel needs to decide and choose the desired accommodation, based on previous guest experiences and the accommodation description. Airbnb system allows communication between the guest and accommodation owner before booking, but it is limited and highly censored. Censorship works automatically and blocks all the names, postal addresses, phone numbers, email addresses and links to host website. At a time when everything is transparent and free of charge this problem is obvious. In tourism there is no solution that enables completely open and transparent communication without charge. This means that within all the existing solutions for the online travel market user must register in the system, enter his details, including his credit card number to get in touch with the owner or agent of the property to complete booking.

4. CONCEPTUAL MODEL OF ONLINE ACCOMMODATION PRESENTATION AND DISCOVERY

After a thorough review of the online travel market size and the analysis of the same, we came to the conclusion that there is enough space for a new application for online accommodation presentation and discovery without commission to the accommodation owner and to the guest. Our new application based on the proposed model is called Spotie. It is developed as a startup (Blank and Dorf, 2012), which means it contains the basic features of this approach: the use of high technology, the product is new and has an unknown business model. By its nature, it has the great potential for growth. In most cases product can be quite cheap to produce and to reproduce. The startup growth model must be scalable, because it cannot happen if you increase the volume of users that you must increase the number of employees at the same rate.

4.1. Description of the Solution

Two main characteristics and novelty of our proposed conceptual model of online accommodation presentation and discovery are shown in Figure 2. First one is the direct contact between accommodation owner and the guest, and second one is 0% commission on the accommodation rental service for the accommodation owner and for the guest.

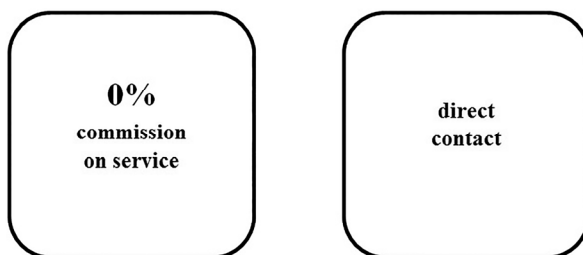


Figure 2 Characteristics of conceptual model of online accommodation presentation and discovery

If this completely free of charge on booking accommodation service, type of application came to life on the market it would be mutually beneficial to the accommodation owners, but also for the guests. Accommodation owners should earn more money with their current offer, regarding the cost of commission could be implemented in their own price, or if leaving the price untouched, they could save for the amount of commission to other online accommodation services. Guests would then be sure that it is the lowest price for

the selected accommodation which can be found on the Internet, and that there is no extra fee for the booking accommodation service.

On the other hand, application Spotie would also be a mobile platform where the accommodation owners can offer their accommodation to the guests with a direct contact, uncensored and completely transparent.

4.2. Concept of the solution

Carrying out our research, we have noticed that the guest habits have changed a lot in the last decade, and that most of the target audience, particularly the young, make their decision for accommodation booking on the basis of photos, free Wi-Fi and the price of the accommodation (Figure 3). We took those three facts as a starting point in creating the concept of the solution.



Figure 3 Concept of the solution of online accommodation presentation and discovery

The simplicity of the application and website should be provided immediately at first sight, making it clear to whom it is intended and for what it is used. On the one side, it should be intended for the guests who travel, and on the other side to the business subjects that are offering hotel and private accommodation.

Therefore, in order to simplify adding new accommodation units for accommodation owners, and to simplify selection of places to stay for the guests, the first version of the application will focus on three essential items: up to five best photos of accommodation unit, information about lowest price and information about free Wi-Fi.

In order for the product to be effective and to follow modern trends on the Internet, it must contain four main determinants. The product must be: functional, inexpensive, attractive and simple.

4.2.1. Product Functionality

The functionality is the primary concern of every product today. Regardless the attractiveness of the product design, it must allow all the functionality for which the product is aimed. The goal of the product is to allow a quick search for accommodation, and to allow users after only one search to select accommodation unit for a potential booking. Also, after selecting the accommodation unit user must be able to get in direct contact with the accommodation owner after a single click.

4.2.2. Product Price

In order for a product to be attractive it should also be useful and inexpensive. The basic model of the product will be free for all, for the guests and for the accommodation owners. It will also offer free hotel and private accommodation presentation. In addition, the main idea of the product is that it works with 0% commission for the guests and for the accommodation owners. With that fact, it is many times cheaper, respectively free to the other competitors on the market. Extra charging options will be carried out on the model of premium services, as well as additional features at a price of ninety-nine cents.

4.2.3. Product Attractiveness

The focus of the product is big photos of the accommodation units, which further facilitates the question of perspicuous and modern design. The product will follow modern trends in mobile and web application design, so-called metro design (Lal, 2013), intelligently using colours aiming to the minimalism and simplicity. The product will also be attractive by its possibilities, because within its offer, it will contain the lowest price on the market, given that price does not include the commission of the system.

4.2.4. Product Eases of Use

The product will be easy to use, which means that users do not have to register or to give their credit card number for contacting the accommodation unit owner. On the other hand, it will be very easy to add accommodation units, since the focus is on just up to five photos, information about free Wi-Fi and the information about the lowest price of the accommodation unit.

4.3. Proposed Model Architecture

Spotie is designed as a web application that consists of the client and server side, as shown in Figure 4.

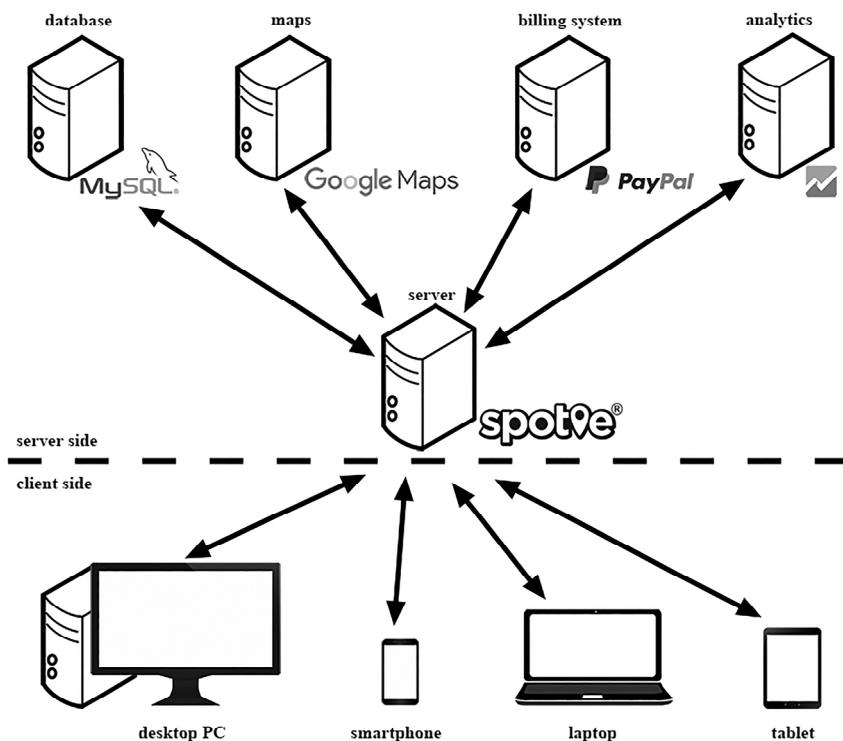


Figure 4 Proposed model architecture

The server side of the web application would use Google Maps API for creating and storing map with accommodation unit locations, PayPal Express Checkout API for charging additional features and premium services, Google Analytics Embed API for detailed tracking of user activity in order to make advanced analytics, and custom programmed server application for presentation and discovery of information on accommodation units in the system. On the client side users access this web application using a web browser on their computer, laptop, smartphone, and tablet or through a Spotie mobile application. Presentation side of the web application is implemented using client technologies like HTML, CSS and JavaScript. As a platform for the database MySQL is used, with which the server communicates during almost every single query.

5. CONCLUSION

The use of innovative application solutions appears in all segments of the personal and business life in order to improve the efficiency and productivity of the same. Hotel managers and owners of private accommodation units must be

accompanied by modern and new trends in order to maintain occupancy of their accommodation units at a high level. The younger generation is more easily adapted to the more attractive and more modern solutions and at the same gain confidence easier and find the desired service.

What is happening or has already happened in certain industries, like music or gaming industry is that in the beginning they function on the business model of direct payments with the sale of products (albums or video games). After that, subscription approach is introduced, for which users pay on a monthly basis for the service. Lately we have witnessed that these models have lost most of the audience, and that almost all of the most popular online systems are free models (freemium). What costs in those models are purchases within an application or system itself, additional features that improve your experience of the usage, or are giving you a significant improvement over other systems' users.

Big OTA services like Airbnb and TripAdvisor are reducing their rental fees, and in the coming years they will almost certainly reach their complete elimination. At that point, their business model will have to find an alternative. As long as these services have at least 1% of commission, this means that their users before communications have to perform detailed registration and payments. Our mobile and web application Spotie there has a great chance that should be effectively realized within the next two years in order to perceive the effect and the idea among accommodation owners and guests. This will be achieved by attracting new customers, continuous development and improvement of the model, and a series of investments in the future.

Anyway, online travel is the largest eCommerce and still is on the rise. It will be interesting to observe what will happen in the future by commercialization of modern technologies such as smart watches, smart glasses and virtual reality equipment, which is going to be implemented in different ways in all segments of today's life and business, as well as in online tourism and travel.

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NOVI MODEL *ONLINE* OGLAŠAVANJA I PRONALAZENJA SMJEŠTAJA

Sažetak

Ekstremno širenje digitalnih tehnologija i društvenih mreža posljednjih godina imalo je veliki utjecaj na tržište putovanja i online turizam. Uz digitalizaciju turizma i putovanja, svakodnevno se sve više rezervacija smještaja odvija online. Najpopularnije internetske stranice za putovanja obično naplaćuju rezervaciju smještaja i ne dopuštaju izravan kontakt s vlasnicima smještaja. Danas turisti traže više za svoj novac, zato će informacije o odredištu lakše pronaći na društvenim mrežama i na lokalnim web stranicama odredišta. Novija istraživanja također pokazuju rastući trend u online rezervacijama putem izravnog kontakta s hotelima ili vlasnicima privatnih smještaja. U ovom radu predstavljamo novi model online oglašavanja i pronalazjenja smještaja. Prva novost u našem pristupu je u izravnom kontaktu između gosta i vlasnika smještaja. Druga novost je da je proces rezervacije besplatan, 0% provizija vlasniku i gostu. Kao polazište u razvoju web i mobilne aplikacije temeljene na našem modelu koristili smo navike ciljane grupe, koja donosi odluku o smještaju na temelju fotografija, besplatnog wireless povezivanja i cijene.

Ključne riječi: mobilna aplikacija, online putovanje, startup, turizam, smještaj.

JEL klasifikacija: C88, L86, M13, M37, Z32

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UTJECAJ DEMOGRAFSKIH KARAKTERISTIKA POTROŠAČA NA PROCES DONOŠENJA ODLUKE O KUPOVINI

UDK / UDC: 659.113.25:316.346

JEL klasifikacija / JEL classification: J10, M31

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Sažetak

Ponašanje potrošača u procesu kupovnog odlučivanja određeno je mnogim čimbenicima, a cilj ovog rada je istražiti utjecaj demografskih čimbenika na proces donošenja kupovne odluke. Za potrebe rada provedeno je primarno istraživanje među hrvatskim potrošačima instrumentom anketnog upitnika s ciljem ispitivanja utječu li, i na koji način, demografske karakteristike ispitanika poput spola, dobi, obrazovanja, radnog statusa i osobnih prihoda na proces donošenja odluke o kupovini. Identificiranje demografskih obilježja potrošača pomaže maloprodavačima u određivanju ciljnih tržišta te u predviđanju budućih kupovnih navika potrošača. Znanstveni doprinos rada ogleda se u tome što je kupovni proces istraživan zasebno po fazama procesa temeljem čega se mogu donijeti konkretni zaključci i preporuke maloprodavačima kako prilagoditi maloprodajnu strategiju ciljanom segmentu potrošača. U obradi rezultata

korišteni su statistički testovi, t-test i ANOVA. Rezultati pokazuju da demografske karakteristike ispitanika utječu na proces donošenja odluke o kupovini, te da se njihov utjecaj razlikuje, kako međusobno, tako i po fazama kupovnog procesa.

Ključne riječi: ponašanje potrošača, proces donošenja odluke o kupovini, demografske karakteristike.

1. UVOD

Na tržištu koje obiluje različitim proizvodima i uslugama maloprodavači pri oblikovanju jedinstvene ponude moraju spoznati potrebe i želje potrošača. S obzirom da se potrebe i prioriteti različitih segmenata potrošača razlikuju, potrebno je istražiti njihovo ponašanje i osmisliti marketinšku strategiju kojom će nastupiti na tržištu. U tome maloprodavačima pomaže znanstvena disciplina ponašanja potrošača koja proučava utjecaj različitih čimbenika na ponašanje potrošača u procesu kupovnog odlučivanja. U okviru različitih čimbenika koji utječu na ponašanje potrošača, između ostalih, proučavaju se demografski čimbenici. Demografija kao znanost proučava broj i strukturu stanovništva te otkriva promjene i trendove u društvenim kretanjima, kao što su starenje stanovništva, opadanje stope nataliteta, porast broja samačkih kućanstava, porast broja obrazovanih, porast broja zaposlenih žena i sl., koji utječu na ponudu i potražnju za proizvodima i uslugama. Identificiranje ovih demografskih obilježja maloprodavačima pomaže u određivanju ciljnih tržišta te također u predviđanju budućih kupovnih navika potrošača. Zbog toga je svrha ovog rada istražiti kupovno odlučivanje i donijeti zaključke kako dob, spol, obitelj, zanimanje, prihodi te obrazovanje utječu na svaku od faza kupovnog procesa, tj. na prepoznavanje potrebe, traženje informacija, vrednovanje alternativa, kupovinu proizvoda i poslijekupovno vrednovanje. Dobivena saznanja mogu biti preporuka maloprodavačima i marketinškim stručnjacima kako prilagoditi maloprodajnu i marketinšku strategiju ciljanoj demografskoj skupini potrošača. U skladu s time provedeno je primarno istraživanje instrumentom anketnog upitnika među hrvatskim potrošačima. Obrada rezultata uključivala je deskriptivnu statistiku te statističke testove za ispitivanje značajnosti razlika aritmetičkih sredina između različitih demografskih skupina ispitanika (t-test i ANOVA).

Rad je strukturiran kako slijedi. U drugom dijelu rada dan je pregled postojećih istraživanja o utjecaju dobi, spola, obitelji, zanimanja, prihoda i obrazovanja na ponašanje potrošača. Treći dio rada opisuje instrument istraživanja i karakteristike uzorka ispitanika. U četvrtom dijelu rada dani su rezultati primarnog istraživanja, za cjelokupan uzorak i prema demografskim karakteristikama ispitanika. Peti dio rada donosi najvažnije empirijske zaključke, znanstveni doprinos rada, implikacije za praksu, te ograničenja i preporuke za buduća istraživanja.

2. PREGLED LITERATURE

Postojeća istraživanja o utjecaju demografskih karakteristika na ponašanje potrošača i donošenje odluke o kupovini mogu se podijeliti na istraživanja o: (1) utjecaju dobi, (2) spola, (3) obitelji te (4) zanimanja, prihoda i obrazovanja.

2.1. Utjecaj dobi na ponašanje potrošača

Izbor proizvoda često ovisi o dobi potrošača jer se potrebe i želje ljudi razlikuju ovisno o njihovoj dobi. Zato je struktura stanovništva prema dobi važan pokazatelj maloprodavačima prilikom osmišljavanja ponude proizvoda i usluga. Kao što ista ponuda proizvoda i usluga nije jednako privlačna ljudima različite dobi, tako ni marketinške aktivnosti kojima maloprodavači dolaze do svojih potrošača nisu jednake za sve segmente potrošača.

Potrošačko ponašanje započinje u ranom djetinjstvu, u dobi od tri do četiri godine (Kosić, 2011), a proučavanje ponašanja djece kao potrošača istraživači nazivaju fazom u procesu socijalizacije potrošača. To je proces u kojem mladi ljudi stječu sposobnosti, znanja i stavove relevantne za njihovo funkcioniranje kao potrošača na tržištu (Akturan *et al.*, 2011). Proces socijalizacije se izvršava preko utjecaja obitelji i medija. Djeca uče o potrošnji promatrajući svoje roditelje i oponašajući njihovo kupovno ponašanje. Prema Solomonu *et al.* (2015) djeca do dobi od pet godina kupnju obavljaju uz pomoć roditelja, bake ili djeda, a većina ih do osme godine kupuje samostalno te su već potpuno formirani potrošači. Prema Kosić (2011) istraživanja pokazuju da djeca utječu na 60 % odluka pri odabiru marke proizvoda tijekom obiteljske kupovine, a 20 % roditelja traži njihovo mišljenje pri kupnji. Utjecaj medija se očituje kroz kontinuiranu izloženost porukama o potrošnji u oglasima na televiziji, radiju i Internetu. Pa tako Jansson-Boyd (2010) kaže da su djeca u dobi iznad tri godine sposobna prisjećati se naziva maraka koje su vidjeli na promotivnim porukama, pogotovo ako promotivne poruke sadržavaju neki upadljivi detalj koji se može povezati s proizvodom. Djeca u najvećoj mjeri odlučuju o proizvodima poput slatkiša, igračkaka, bezalkoholnih pića i grickalica, a u rjeđim slučajevima i o kupovini knjiga, odjeće i sportske opreme (Milas, 2007).

Tinejdžeri su jednako tako važan segment u istraživanju ponašanja potrošača. U razdoblju odrastanja, oni formiraju svoj identitet, stavove, vrijednosti, kao i potrošačko ponašanje te vrlo rano razvijaju lojalnost prema određenim markama koju zadržavaju i kada odrastu čime stvaraju buduće tržište (Akturan *et al.*, 2011). Prema Solomonu *et al.* (2015) tinejdžeri proizvode koriste kako bi izrazili svoje identitete, istraživali svijet i kako bi se pobunili protiv autoriteta svojih roditelja i ostalih osoba u procesu socijalizacije. Imaju indirektan utjecaj na kupovne odluke kućanstva te sve više kupuju ne samo za sebe, nego i za cijelu obitelj (Kosić, 2011). Kesić (2006) smatra da se tržište za ovaj segment potrošača značajno razvilo u području modne odjeće, pića, prehrambenih

proizvoda i sportske odjeće i obuće te je razvijen veliki broj novih i inoviranih proizvoda potaknut željama i motivima ovih potrošača.

Potrošače rođene između 1977. i 1994. godine karakterizira izražena potreba za prihvaćanjem i povezivanjem s vršnjacima te za društvenim mrežama (Williams i Page, 2010). Radi se o segmentu koji je pri vrhuncu svojih fizičkih, psihičkih i kupovnih mogućnosti (Kesić, 2006) te pripadnici ovog segmenta vole isprobavati nove proizvode, preferiraju poznate marke i manje su cjenovno osjetljivi (Dickson *et al.*, 2004). Ova grupa potrošača je bolje obrazovana i više lojalna markama od prethodnih generacija te kupuje skupocjenu odjeću, računala i elektroničke uređaje. Jednako tako su vrlo posvećeni svojem imidžu, traže proizvode koji odgovaraju njihovim specifičnim potrebama te su zainteresirani za tetovaže, nakit, obuću, namještaj, sportsku opremu i zabavu. Maloprodavači moraju kontinuirano prilagođavati i modernizirati svoju ponudu za ove potrošače kojima sve ubrzo dosadi (Williams i Page, 2010).

Tržište starijih čine potrošači preko 50 godina starosti. Unatoč demografskom trendu starenja stanovništva i posljedičnom povećanju ovog segmenta kupaca, nije im posvećena dostatna pažnja u marketinškom smislu (Meneely *et al.*, 2009). Maloprodavači bi trebali pripremiti više proizvoda i usluga koje mogu koristiti stariji potrošači. Promocija tih proizvoda bi trebala biti veoma pažljivo osmišljena jer nude proizvode osobama koje su starije po svojoj dobi, ali po samopercepciji nisu toliko stare (Mumel i Završnik, 2007). Područja potrošnje u kojima ovi potrošači imaju veliki udio su blagdanske kupnje, uređivanje kuća, krstarenja i turizam, kozmetička kirurgija i tretmani kože, zdravlje te financijska i pravna pitanja (Solomon *et al.*, 2015). Pri preradi informacija, ovi potrošači imaju problema s preradom novih podataka i zato se pri odlučivanju o kupovini koriste informacijama naučenima u prošlosti te su najčešće lojalni markama koje su kupovali u mlađim godinama (Kesić, 2006).

2.2. Utjecaj spola na ponašanje potrošača

Spol je jedan od najčešćih kriterija za segmentaciju tržišta koji je značajan već u najranijoj dobi potrošača. Istraživanja pokazuju da se žene i muškarci razlikuju s obzirom na proizvode koje kupuju, način na koji reagiraju na promociju, način i vrijeme procesuiranja informacija za vrijeme kupovine, s obzirom na vrijeme koje provedu unutar prodavaonice i s obzirom na potrošnju (Anić *et al.*, 2010). Tradicionalan pogled na muškarce je da oni ne vole kupnju, vrlo su nestrpjivi kada treba sudjelovati u kupnji i manje kupuju od žena, dok žene vole kupovinu i obavljaju glavninu kupnju u kućanstvu (Anić *et al.*, 2015). Međutim, s promjenom društvenih vrijednosti mijenjaju se i tradicionalne vrijednosti te kupovne navike. Danas je sve više žena uključeno u tržište rada, veći im je dohodak i imaju manje vremena za kupnju. One ekonomiziraju vrijeme tako što kupuju rjeđe te su lojalne određenim markama i prodavaonicama, često kupuju tijekom večernjih sati i vikendom te putem Interneta i kataloga (Kosić,

2011). Istraživanja pokazuju da su žene odgovorne za gotovo 80% svih odluka o kupovini (Schiffman i Kanuk, 2004), da općenito više uživaju u kupovini od muškaraca, sklonije su impulzivnoj kupovini i da su lojalnije markama (Tifferet i Herstein, 2012) te se zato sve više maloprodavača obraća ženama kao ciljnoj skupini. S druge strane, muškarci sve više vremena posvećuju kućanskim poslovima, između ostalog kupnji koju su prije prvenstveno obavljale žene (Anić *et al.*, 2015) i uglavnom dominiraju u kupovini osiguranja i proizvoda za korištenje izvan kuće, provode manje vremena u kupovini te manje troše na izgled i pokazuju manje interesa za modne proizvode od žena (Anić *et al.*, 2010).

Trendovi se kreću u pravcu *unisex* proizvoda kod kojih nema velike razlike između ženskog i muškog segmenta potrošača. Zanimljivu kategoriju proizvoda s obzirom na uklanjanje razlike između ženskog i muškog spola predstavljaju muški parfemi. Iako muškarci sve više upotrebljavaju parfeme, procijenjeno je da je 30% muških parfema nošeno od strane žena (Schiffman i Kanuk, 2004).

Što se tiče prikupljanja i prerade informacija, prema Kesić (2006) žene detaljnije prerađuju informacije i vrednuju proizvod po svim obilježjima dok muškarci vrednuju informacije temeljem globalnog sagledavanja problema. Žene pri donošenju odluka koriste podjednako i verbalnu i vizualnu stranu uma dok muškarci više koriste verbalnu, logičnu stranu i zaključuju temeljem činjenica. U osnovi, žene najčešće uživaju u kupovini i crpe niz psiholoških i socioloških zadovoljstava dok muškarci kupovinu doživljavaju kao funkciju pribavljanja proizvoda koji im je potreban.

2.3. Utjecaj obitelji na ponašanje potrošača

Obitelj je temeljna referentna skupina čijim članom pojedinac postaje svojim rođenjem te ima najveći utjecaj na njegovo ponašanje koje uključuje i kupovno ponašanje. Utjecaj obitelji na potrošačke odluke pojedinca se ogleda kroz dva načina. Kao prvo, obitelj utječe na obilježja ličnosti, stavove i vrijednosti pojedinca (Kesić, 2006) te se mnoge potrošačke odluke donose u obiteljskom okruženju. Drugi utjecaj predstavlja stadij životnog ciklusa obitelji koji određuje vrstu kupovine koju obavljaju njezini članovi (Foxall *et al.*, 2007).

Životni ciklus obitelji predstavlja proces zasnivanja obitelji, podizanja djece i konačnog umirovljenja te osim što odražava dob i prihode te promjene u obiteljskoj situaciji, utječe i na ono što se kupuje kao i na način donošenja kupovne odluke (Kosić, 2011). Životni ciklus obitelji se sastoji od pet faza koje uključuju momaštvo, medeni mjesec, roditeljstvo, poslijeroditeljstvo i udovištvo (Foxall *et al.*, 2007). Momaštvo podrazumijeva mladu neoženjenu odraslu osobu koja živi odvojeno od roditelja. Mladi ovog stadija su skloni svoje prihode trošiti na unajmljivanje stana, osnovno pokučstvo, kupovinu i održavanje automobila, putovanja i zabavu te odjeću (Schiffman i Kanuk, 2004). Jednako tako su skloni redovnoj tjelovježbi, odlaženju u kafiće, na koncerte, u kino, restorane i na ples te

konzumiraju više alkohola (Solomon *et al.*, 2015). Iduća faza, medeni mjesec započinje vjenčanjem, a završava kada par dobije prvo dijete. Budući da mnogi mladi muževi i žene rade, ti parovi posjeduju zajedničke prihode koji im često dozvoljavaju da kupovinom udovolje svojim željama, da uštede ili da višak sredstava investiraju. Ipak, susreću se i s velikim troškovima kao što je na primjer uređenje novog doma (Schiffman i Kanuk, 2004). Stadij roditeljstva traje puno duže od prethodne dvije faze, preko 20 godina. Struktura obitelji je sada drukčija, kao i potrošnja financijskih sredstava. Glavnu riječ u obiteljskoj kupovini ima majka koja ima ulogu domaćice. Segment takve obitelji je vrlo profitabilan te poduzeća kreiraju ponudu proizvoda i usluga kao što su obiteljski automobili, obiteljska i dječja štednja, omekšivači za osjetljivo dječje rublje, obiteljske kreditne kartice, itd. (Kosić, 2011). Za ove potrošače je važno da je proizvod funkcionalan, da se njime lako rukuje i da je dostupan jer majke nemaju puno vremena za istraživanje i obilazak prodavaonica. Kako roditelji žele samo najbolje za svoju djecu, spremni su platiti više za proizvode koji im jamče veću vrijednost i kvalitetu (Kosić, 2011). U ovoj fazi izdaci uzdržavanja i obrazovanja djece smanjuju dio sredstava namijenjenih odmoru i zabavi (Kesić, 2006). Faza poslijeroditeljstva započinje kada djeca napuste obiteljski dom. Tada oba roditelja imaju vremena posvetiti se sebi, za putovanja, zabavu, preuređenje kuće ili stana ili možda za prodaju kuće ili stana i kupovinu novog. U ovoj fazi, bračni par posjeduje veće raspoložive prihode zahvaljujući uštedi, ulaganjima te manjim troškovima te ovo postaje važno tržište za luksuznu robu, nove automobile, skupi namještaj te putovanja u daleka mjesta (Schiffman i Kanuk, 2004). Posljednja je faza udovištva u kojoj se događa raspadanje obitelji smrću jednog bračnog partnera. Živuću bračni drug često odabire slijediti ekonomičniji stil života, traži osobu za druženje ili ulazi u novi brak (Schiffman i Kanuk, 2004).

2.4. Utjecaj zanimanja, prihoda i obrazovanja na ponašanje potrošača

Zanimanje osobe uvelike utječe na odluke o kupnji jer osobe s različitim zanimanjem imaju i različite potrebe za pojedinom vrstom i kvalitetom proizvoda. Zato maloprodavači prilagođavaju svoje proizvode određenim grupama zanimanja. Na strukturu i opseg potrošnje utječu i prihodi koji su često vezani uz zanimanje. S obzirom da visina primanja potrošača određuje njihovu kupovnu moć, potrošači visokih primanja si mogu omogućiti kupovinu nekretnina, police životnog osiguranja, skupe automobile, putovanja itd. Nasuprot tome, potrošači skromnijih primanja će zadovoljavati osnovne životne potrebe i odabirati cjenovno pristupačnije proizvode. Zanimanja na visokim razinama, koja donose visoke prihode, uglavnom zahtijevaju i naprednije obrazovanje, a pojedinci sa slabijim obrazovanjem se rijetko bave zanimanjima na višoj razini. Iz spomenutoga se može zaključiti da su zanimanje, dohodak i obrazovanje demografske karakteristike koje se proučavaju zajedno i to kroz pojavu društvenih klasa. Društvena klasa je skupina ljudi koji dijele slične vrijednosti,

stil života, interese i ponašanje (Previšić i Bratko, 2001). S obzirom da su pojedinci grupirani po približno sličnim zanimanjima i sličnom načinu života na temelju svojih prihoda i obrazovanja, oni dijele i slično kupovno ponašanje pa u tom smislu društveni sloj predstavlja određeni segment potrošača. Ovisno o pripadnosti društvenom sloju razlikuju se načini zadovoljenja potreba i želja potrošača jer svaki stalež ima svoj izbor proizvoda i usluga. Pojedinci se mogu svrstati u gornji, srednji i donji stalež.

Struktura potrošnje gornjeg staleža je usmjerena statusnim proizvodima, kupovini knjiga, putovanjima, investiranju u umjetnička djela, članstvu u privatnim klubovima i školovanju djece u uglednim školama (Kesić, 2006). Visoka cijena je jedan od kriterija na osnovu kojeg kupuju pripadnici ovog segmenta. Zato kupuju skupe proizvode ili odjeću s potpisom poznatih svjetskih dizajnera i sl. Ovi potrošači su skloni voditi računa o izgledu i tjelesnom imidžu pa ih više zanimaju dijetalna hrana i pića nego potrošačke radničke klase. Ovaj stalež koristi usluge sportskih trenera, masera i plastičnih kirurga. Više su usredotočeni na dugoročnije ciljeve, poput štednje za školarine ili umirovljenje (Kesić, 2006). Pripadnici srednjeg staleža kupuju na kredit kvalitetne marke s prihvatljivim cijenama. U svome se ponašanju najčešće rukovode višim staležom bilo da je riječ o kupovini pojedinih marki proizvoda ili izboru sporta. Velik broj pripadnika ovog segmenta troši u restoranima te na odmor i putovanja, na odjeću i stvari za kućanstvo (Kesić, 2006). Prema Schiffman i Kanuk (2004) potrošači iz donje srednje klase imaju snažnu sklonost prema majicama, kapama i drugim odjevnim predmetima koji pokazuju vanjsku oznaku identifikacije, kao što je ime štovane osobe ili grupe (npr. Michael Jordan), respektirana kompanija ili ime marke (npr. Heineken) ili cijenjeni zaštitni znak (npr. Nike) te su glavna meta za licenciranu robu. Potrošači radničke klase vode računa o čvrstoći i udobnosti, a ne o stilu ili modernosti te su manje skloni eksperimentiranju s novim proizvodima. Oni kupuju iz potrebe, poput novog hladnjaka ili televizora. Orijentirani su na lokalnu zajednicu, kulturu i ponašanje te tradicionalne vrijednosti, a prioritet im je održavanje izgleda vlastitog doma i imovine, bez obzira na veličinu kuće (Solomon *et al.*, 2015). Oni preferiraju domaće proizvode, a hranu najčešće pripremaju i jedu kod kuće. Proizvodi koje konzumiraju pripadnici ovog staleža su pivo, automobili srednjih klasa domaće proizvodnje, cigarete te specifični časopisi kao što je „Uradi sam“ (Kesić, 2006).

3. METODOLOGIJA ISTRAŽIVANJA

3.1. Opis instrumenta istraživanja i uzorka

Za potrebe rada provedeno je primarno istraživanje među hrvatskim potrošačima s ciljem ispitivanja utječu li, i na koji način, demografske karakteristike ispitanika na proces donošenja odluke o kupnji. Proces donošenja odluke o kupnji razmatran je po fazama procesa: prepoznavanje potrebe, traženje informacija, vrednovanje alternativa, kupovina robe i poslijekupovno

vrednovanje. Instrument istraživanja bio je anketni upitnik distribuiran Internetom. Anketni upitnik sastojao se od pet pitanja zatvorenog tipa vezanih uz demografske karakteristike ispitanika poput spola, dobi, obrazovanja, radnog statusa i visine osobnih prihoda, te niza tvrdnji vezanih uz sam kupovni proces po fazama za koje su ispitanici ocjenjivali stupanj slaganja na skali od 1 do 5 gdje 1 predstavlja „u potpunosti se ne slažem“, a 5 „u potpunosti se slažem“. Istraživanje je provedeno tijekom kolovoza i rujna 2016. godine. Tijekom spomenutog razdoblja prikupljen je 71 valjani odgovor. Tablica 1. prikazuje demografske karakteristike ispitanika.

Tablica 1.

Demografske karakteristike ispitanika

Demografske karakteristike	N	%
Spol		
<i>Muški</i>	20	28,2
<i>Ženski</i>	51	71,8
Dob		
<i>19-25</i>	21	29,6
26-35	29	40,8
<i>36-45</i>	7	9,9
<i>46-65</i>	11	15,5
<i>66 i više</i>	3	4,2
Obrazovanje		
SSS i niža	24	33,8
<i>VŠS</i>	15	21,1
<i>VSS</i>	21	29,6
<i>Magisterij i doktorat</i>	11	15,5
Radni status		
<i>Student/ica</i>	25	35,2
Zaposlen/a	37	52,1
<i>Nezaposlen/a</i>	3	4,2
<i>Umirovljenik/ica</i>	6	8,5
Osobni prihodi		
Do 2.000 kn	18	25,4
<i>2.001-3.000 kn</i>	14	19,7
<i>3.001-5.000 kn</i>	15	21,1
<i>5.001-7.000 kn</i>	13	18,3
<i>7.001-10.000 kn</i>	7	9,9
<i>10.001 kn i više</i>	4	5,6
UKUPNO	71	100

Vidljivo je da je većina ispitanika ženskog spola (71,8%), mlade životne dobi od 26 do 35 godina (40,8%), srednje stručne spreme ili niže (33,8%) i zaposlena (52,1%). Što se tiče visine osobnih prihoda, većina ispitanika raspolaže prosječnim mjesečnim primanjima do 2.000 kuna (25,4%). Međutim, pri tome treba uzeti u obzir da su dohodovne skupine relativno usko postavljene. Kada bi se promatralo kumulativno 45,1% ispitanika raspolagalo bi prihodima do 3.000 kuna; 66,2% ispitanika prihodima do 5.000 kuna; 84,5% ispitanika prihodima do 7.000 kuna te 94,4% ispitanika prihodima do 10.000 kuna.

Kao ograničenja istraživanja treba istaknuti kratko vrijeme provođenja ankete te mali broj prikupljenih odgovora, što oslabljuje reprezentativnost uzorka. Način provođenja anketnog upitnika putem Interneta zanemario je ispitanike niže informatičke pismenosti. Usko kreirani dohodovni razredi su pridonijeli nemogućnosti donošenja konzistentnih zaključaka o utjecaju prihoda ispitanika na proces donošenja odluke o kupovini.

3.2. Analiza rezultata istraživanja

Za svaku fazu, odnosno korak, u procesu donošenja odluke o kupovini kreirano je nekoliko tvrdnji te je od ispitanika traženo da na skali od 1 do 5 ocijene u kojoj se mjeri slažu s navedenim tvrdnjama, gdje 1 predstavlja „u potpunosti se ne slažem“, 2 „u potpunosti se slažem“, 3 „niti se slažem niti se ne slažem“, 4 „slažem se“ i 5 „u potpunosti se slažem“. Tablica 2. prikazuje tvrdnje po fazama kupovnog procesa, njihove skraćene oznake koje će se koristiti u nastavku članka i srednje ocjene mjerene jednostavnom aritmetičkom sredinom.

Tablica 2.

Srednje ocjene tvrdnji po fazama kupovnog procesa

Faza	Tvrdnja	Oznaka	Srednja ocjena
Faza 1: Prepoznavanje potrebe	Na kupovinu novog proizvoda najčešće me može potaknuti kvar proizvoda kojeg posjedujem.	Faza 1: Kvar	4,20
	Na kupovinu novog proizvoda najčešće me može potaknuti zastarjelost proizvoda kojeg posjedujem.	Faza 1: Zastarjelost	3,30
	Na kupovinu novog proizvoda najčešće me može potaknuti privlačan oglas.	Faza 1: Oglas	2,41
	Na kupovinu novog proizvoda najčešće me može potaknuti praćenje trendova.	Faza 1: Trendovi	2,49
Faza 2: Traženje	Važna mi je informacija ili preporuka dobivena od prijatelja i članova obitelji.	Faza 2: Prijatelji i obitelj	4,01

informacija	Važne su mi informacije s Interneta (forumi i društvenih mreža).	Faza 2: Internet	3,51
	Važne su mi informacije iz TV oglasa, časopisa i promotivnih letaka.	Faza 2: Masovni mediji	2,70
	Dovoljno mi je vlastito mišljenje i iskustvo.	Faza 2: Iskustvo	3,56
	Ne tražim dodatne informacije i usredotočujem se samo na one koje su mi dostupne bez posebnih napora.	Faza 2: Ne tražim informacije	2,66
Faza 3: Vrednovanje alternativa	Pri kupovini proizvoda najvažniji kriterij odabira mi je cijena.	Faza 3: Cijena	3,85
	Pri kupovini proizvoda najvažniji kriterij odabira mi je marka odnosno proizvođač.	Faza 3: Marka	3,08
	Pri kupovini proizvoda najvažniji kriterij odabira mi je kvaliteta.	Faza 3: Kvaliteta	4,27
	Pri kupovini proizvoda najvažniji kriterij odabira mi je zemlja porijekla.	Faza 3: Zemlja porijekla	2,70
	Pri kupovini proizvoda najvažniji kriterij odabira mi je dizajn.	Faza 3: Dizajn	3,52
Faza 4: Kupnja robe	Pri odabiru prodavaonice najvažnija mi je lokacija.	Faza 4: Lokacija	3,66
	Pri odabiru prodavaonice najvažnija mi je ugodna atmosfera prodavaonice i ljubaznost osoblja.	Faza 4: Atmosfera	3,54
	Pri odabiru prodavaonice najvažniji mi je imidž prodavaonice.	Faza 4: Imidž	2,94
	Pri odabiru prodavaonice najvažniji su mi popusti.	Faza 4: Popusti	4,07
	Pri odabiru prodavaonice najvažnije su mi dodatne usluge poput dostave i sl.	Faza 4: Dodatne usluge	3,72
Faza 5: Poslijekupovno vrednovanje	Ukoliko proizvod nije ispunio moja očekivanja neću ponovno kupiti taj proizvod.	Faza 5: Neću ponoviti kupnju	4,49
	Ukoliko proizvod nije ispunio moja očekivanja reklamirati ću proizvod i tražiti povrat novca.	Faza 5: Reklamacija	3,38
	Ukoliko proizvod nije ispunio moja očekivanja ispričati ću prijateljima o negativnom iskustvu.	Faza 5: Prepričavanje negativnog iskustva prijateljima	4,15
	Ukoliko proizvod nije ispunio moja očekivanja objaviti ću svoje nezadovoljstvo putem Interneta.	Faza 5: Objava nezadovoljstva putem Interneta	2,38

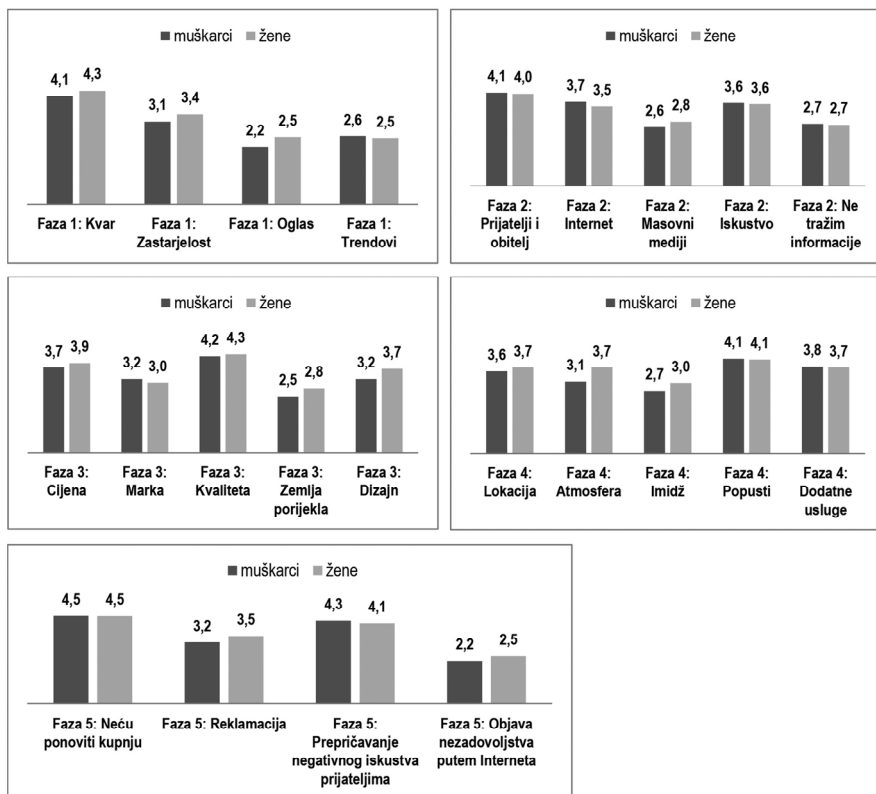
Na temelju srednjih ocjena može se zaključiti da u prvoj fazi procesa donošenja odluke o kupovini većinu ispitanika na kupovinu novog proizvoda najčešće

potiče kvar proizvoda kojeg posjeduju ($M=4,20$). U drugoj fazi koja se odnosi na traženje informacija ispitanici najveću važnost pridaju informacijama i preporukama dobivenima od prijatelja i članova obitelji ($M=4,01$). U trećoj fazi u kojoj potrošači vrednuju i međusobno uspoređuju alternative, ispitanici najveću važnost pridaju kvaliteti proizvoda ($M=4,27$). U četvrtoj fazi u kojoj se događa sam čin kupovine ispitanici u najvećoj mjeri odabir prodavaonice u kojoj obavljaju kupnju temelje na popustima koje prodavaonice u tom trenutku odobravaju ($M=4,07$). U petoj, posljednjoj, fazi koja obuhvaća poslijekupovno vrednovanje proizvoda i iskustva dominantna reakcija nezadovoljnih ispitanika jest neponavljanje kupovine ($M=4,49$).

U daljnjoj analizi detaljnije je istraženo postoji li povezanost između demografskih karakteristika ispitanika i njihovog ponašanja tijekom procesa donošenja odluke o kupovini. Utjecaj spola ispitan je t-testom za utvrđivanje postojanja statistički signifikantne razlike u aritmetičkim sredinama dvaju nezavisnih uzoraka. Utjecaj preostalih demografskih karakteristika ispitan je analizom varijance odnosno ANOVA testom razlika u aritmetičkim sredinama. Svi statistički testovi rađeni su uz razinu signifikantnosti od 5 % ($p=0,05$).

3.2.1. Utjecaj spola na proces donošenja odluke o kupovini

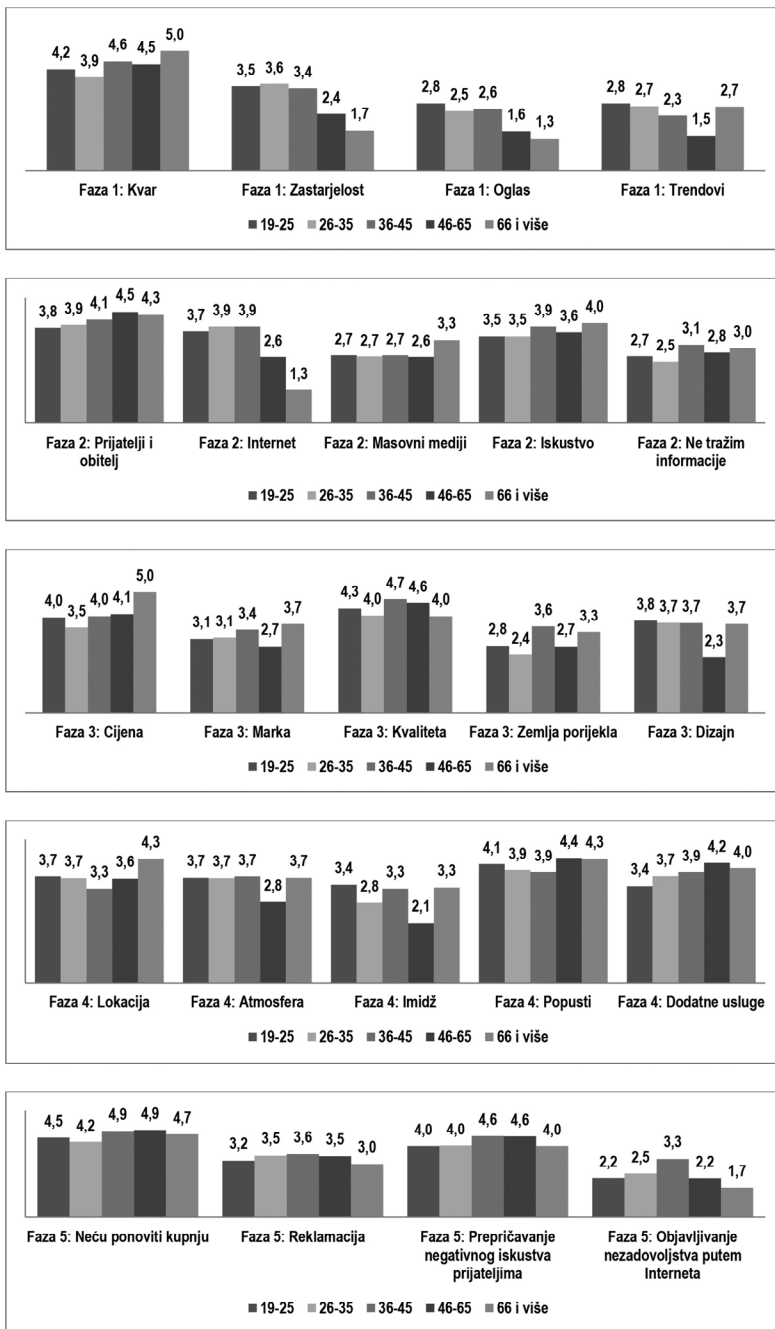
Slika 1. prikazuje srednje ocjene tvrdnji vezanih uz faze procesa donošenja odluke o kupovini prema spolu. Rezultati pokazuju kako prilikom prepoznavanja potrebe za određenim proizvodom žene veću važnost pridaju kvaru i zastarjelosti proizvoda kojeg trenutno posjeduju te privlačnim oglasima, dok muškarci veću važnost pridaju praćenju trendova. Ovakvi rezultati pomalo su iznenađujući pošto brojna istraživanja pokazuju kako su žene sklonije neracionalnom kupovnom ponašanju i impulzivnoj kupovini. Prilikom informiranja o proizvodu i maloprodavačima žene veću važnost pridaju informacijama iz masovnih medija, a muškarci preporukama prijatelja i članova obitelji. Ostali izvori informacija približno su jednako važni jednom i drugom spolu. Prilikom vrednovanja i uspoređivanja alternativnih proizvoda, žene veću važnost pridaju cijeni, kvaliteti, zemlji porijekla i dizajnu, a muškarci marki proizvoda. Nakon što su odabrali proizvod kojeg žele kupiti, potrošači odabiru prodavaonicu u kojoj će obaviti svoju kupovinu. Prilikom odabira prodavaonice žene veću važnost pridaju lokaciji, atmosferi i imidžu, a muškarci dodatnim uslugama. Popusti su jednako bitni i jednom i drugom spolu. U slučaju negativnog iskustva s proizvodom ili maloprodavačem kod kojeg su obavili kupovinu, žene veću važnost pridaju reklamaciji i objavi nezadovoljstva putem Interneta, dok muškarci preferiraju prepričavanje negativnog iskustva prijatelja. Oba spola jednaku važnost pridaju odluci da ne ponove kupovinu dotičnog proizvoda ili kod dotičnog maloprodavača. Međutim, rezultati t-testa pokazuju kako statistički signifikantna razlika u srednjim ocjenama žena i muškaraca postoji samo u četvrtoj fazi kupovnog procesa, u fazi u kojoj se odvija sam čin kupovine, i to u slučaju utjecaja atmosfere prodavaonice [$t(69)=-2,259$, $p=0,030$] koja snažnije utječe na odluku žena o kupovini proizvoda. Drugim riječima, žene su podložnije utjecaju atmosfere u prodavaonici i sklonije su obaviti kupovinu svidi li im se atmosfera i osoblje.



Slika 1. Utjecaj spola na proces donošenja odluke o kupovini, po fazama procesa

3.2.2. Utjecaj dobi na proces donošenja odluke o kupovini

Slika 2. prikazuje srednje ocjene tvrdnji vezanih uz faze procesa donošenja odluke o kupovini prema dobnim skupinama ispitanika. Iz grafičkih prikaza rezultata vidljivo je da ispitanici svih dobnih skupina kao najvažniji poticajni čimbenik na kupovinu novog proizvoda navode kvar postojećeg proizvoda kojeg već posjeduju. U drugoj fazi procesa donošenja odluke o kupovini, prilikom traženja informacija, stariji ispitanici veću važnost pridaju preporukama prijatelja i obitelji, dok mlađi ispitanici uz osobne preporuke uzimaju u obzir i informacije prikupljene s internetskih foruma i društvenih mreža. U trećoj fazi prilikom uspoređivanja alternativnih proizvoda stariji ispitanici veću važnost pridaju cijeni, a mlađi kvaliteti proizvoda. U četvrtoj fazi prilikom odabira konkretne prodavaonice ispitanici svih dobnih skupina najveću važnost pridaju popustima. U petoj fazi koja slijedi nakon samog čina kupovine ispitanici svih dobnih skupina eventualno nezadovoljstvo najčešće rješavaju na način da ne ponove kupovinu dotičnog proizvoda ili kod dotičnog maloprodavača.

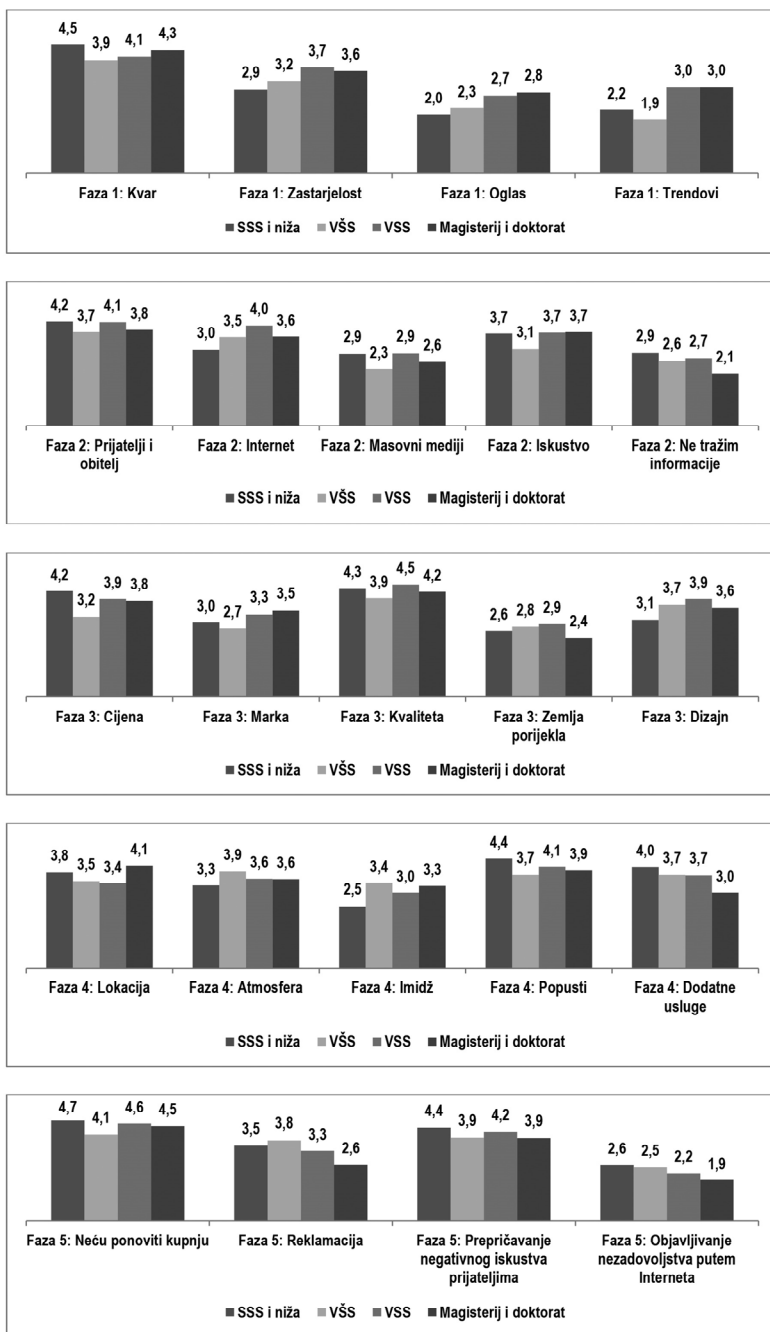


Slika 2. Utjecaj dobi na proces donošenja odluke o kupovini, po fazama procesa

Rezultati ANOVA testa pokazuju da statistički signifikantna razlika u srednjim ocjenama između različitih dobnih skupina postoji u prvoj, drugoj i četvrtoj fazi procesa donošenja odluke o kupovini. Naknadno je proveden Tukeyev HSD test kako bi se točno utvrdilo koje dobne skupine pridaju statistički značajne različite važnosti pojedinim čimbenicima utjecaja. U prvoj fazi značajna razlika postoji u slučaju utjecaja zastarjelosti proizvoda [$F(4,66)=4,041$, $p=0,005$] između dobnih skupina 26 - 35 godina i 46 - 65 godina; oglasa [$F(4,66)=3,694$, $p=0,009$] između dobnih skupina 19 - 25 godina i 46 - 65 godina, te trendova [$F(4,66)=2,547$, $p=0,047$] između dobnih skupina 19 - 25 godina i 46 - 65 godina. Mlađi ispitanici spomenutim čimbenicima poticaja na kupovinu pridaju veću važnost od starijih ispitanika. U drugoj fazi značajna razlika postoji samo u slučaju informacija prikupljenih s Interneta [$F(4,66)=9,062$, $p=0,000$] i to između mlađih dobnih skupina s jedne strane (19-25, 26-35 i 36-45) i starijih dobnih skupina s druge strane (46-65, 66 i više godina). Očekivano, mlađi ispitanici veću važnost pridaju informacijama s Interneta. U četvrtoj fazi značajna razlika postoji samo u slučaju utjecaja imidža prodavaonice [$F(4,66)=3,190$, $p=0,01$] između dobnih skupina 19 - 25 i 46 - 65 godina. Mlađi ispitanici veću važnost pridaju imidžu prodavaonice prilikom odlučivanja o mjestu kupovine.

3.2.3. Utjecaj obrazovanja na proces donošenja odluke o kupovini

Slika 3. prikazuje srednje ocjene tvrdnji vezanih uz faze procesa donošenja odluke o kupovini prema stupnjevima obrazovanja ispitanika. Vidljivo je da ispitanici svih obrazovnih skupina kao najvažniji poticajni čimbenik na kupovinu novog proizvoda navode kvar postojećeg proizvoda kojeg već posjeduju. U drugoj fazi procesa donošenja odluke o kupovini, prilikom traženja informacija, obrazovaniji ispitanici veću važnost pridaju informacijama prikupljenima s internetskih foruma i društvenih mreža. U trećoj fazi pri vrednovanju alternativa obrazovaniji ispitanici veću važnost pridaju dizajnu. U četvrtoj fazi prilikom odabira prodavaonice obrazovaniji ispitanici veću važnost pridaju imidžu. U posljednjoj fazi kupovine ispitanici svih dobnih skupina eventualno nezadovoljstvo najčešće rješavaju na način da ne ponove kupovinu dotičnog proizvoda ili kod dotičnog maloprodavača.

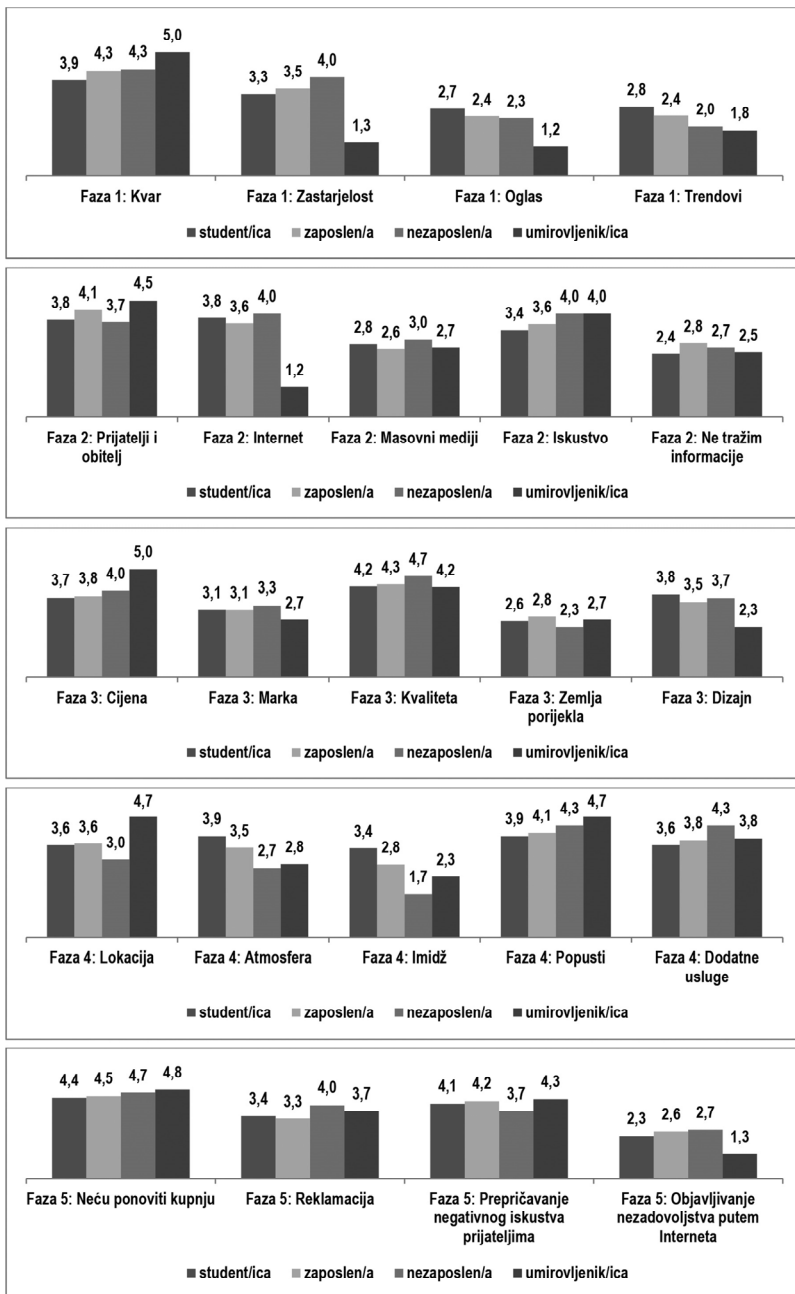


Slika 3. Utjecaj obrazovanja na proces donošenja odluke o kupovini, po fazama procesa

Rezultati ANOVA testa pokazuju da statistički signifikantna razlika u srednjim ocjenama između različitih obrazovnih skupina postoji u prvoj, drugoj, trećoj i petoj fazi procesa donošenja odluke o kupovini. U prvoj fazi značajna razlika postoji u slučaju utjecaja trendova [$F(3,67)=3,597$, $p=0,018$] između obrazovne skupine s višom stručnom spremom (VŠS) s jedne strane i skupina s visokom stručnom spremom (VSS) i magisterijem i doktoratom s druge strane. Obrazovaniji ispitanici podložniji su utjecaju trendova. U drugoj fazi značajna razlika postoji u slučaju traženja informacija putem Interneta [$F(3,67)=3,421$, $p=0,022$] između obrazovne skupine srednje stručne spreme i niže (SSS) i skupine VSS. Obrazovaniji ispitanici skloniji su tražiti informacije putem Interneta. U trećoj fazi prilikom odabira prodavaonice značajna razlika postoji u slučaju utjecaja cijene [$F(3,67)=3,126$, $p=0,031$] između obrazovnih skupina SSS i VŠS. Obrazovaniji ispitanici manje su podložni utjecaju cijene pri odabiru prodavaonice. U petoj fazi poslijekupovnog vrednovanja, prilikom reagiranja na eventualno nezadovoljstvo, značajna razlika postoji u slučaju reklamacije [$F(3,67)=2,761$, $p=0,049$] između obrazovne skupine VŠS i skupine sa završenim magisterijem i doktoratom. Obrazovaniji ispitanici manje su skloni reklamirati proizvod s kojim su nezadovoljni. Moguće objašnjenje dobivenih rezultata jest da obrazovaniji ispitanici raspoložu s većim primanjima, manje slobodnog vremena i informatički su pismeniji. Međutim, potrebna su daljnja istraživanja prije nego što se takvo obrazloženje prihvati bez zadržke.

3.2.4. Utjecaj radnog statusa na proces donošenja odluke o kupovini

Slika 4. prikazuje srednje ocjene tvrdnji vezanih uz faze procesa donošenja odluke o kupovini prema radnom statusu ispitanika. Vidljivo je da u prvoj fazi prilikom prepoznavanja potrebe, u usporedbi s ostalim skupinama ispitanika, umirovljenici veću važnost pridaju kvaru, a manju zastarjelosti, oglasima i trendovima. U drugoj fazi umirovljenici značajno manju važnost pridaju prikupljanju informacija putem Interneta. U trećoj fazi umirovljenici manju važnost pridaju dizajnu proizvoda. U četvrtoj fazi uočava se da umirovljenici podosta veću važnost pridaju lokaciji prodavaonice, dok nezaposlene osobe pridaju mnogo manju važnost imidžu prodavaonice u usporedbi s ostalim skupinama ispitanika. U petoj fazi osjetnija razlika među ispitanicima vidljiva je po pitanju objavljivanja nezadovoljstva putem Interneta čemu su najmanje skloni umirovljenici.

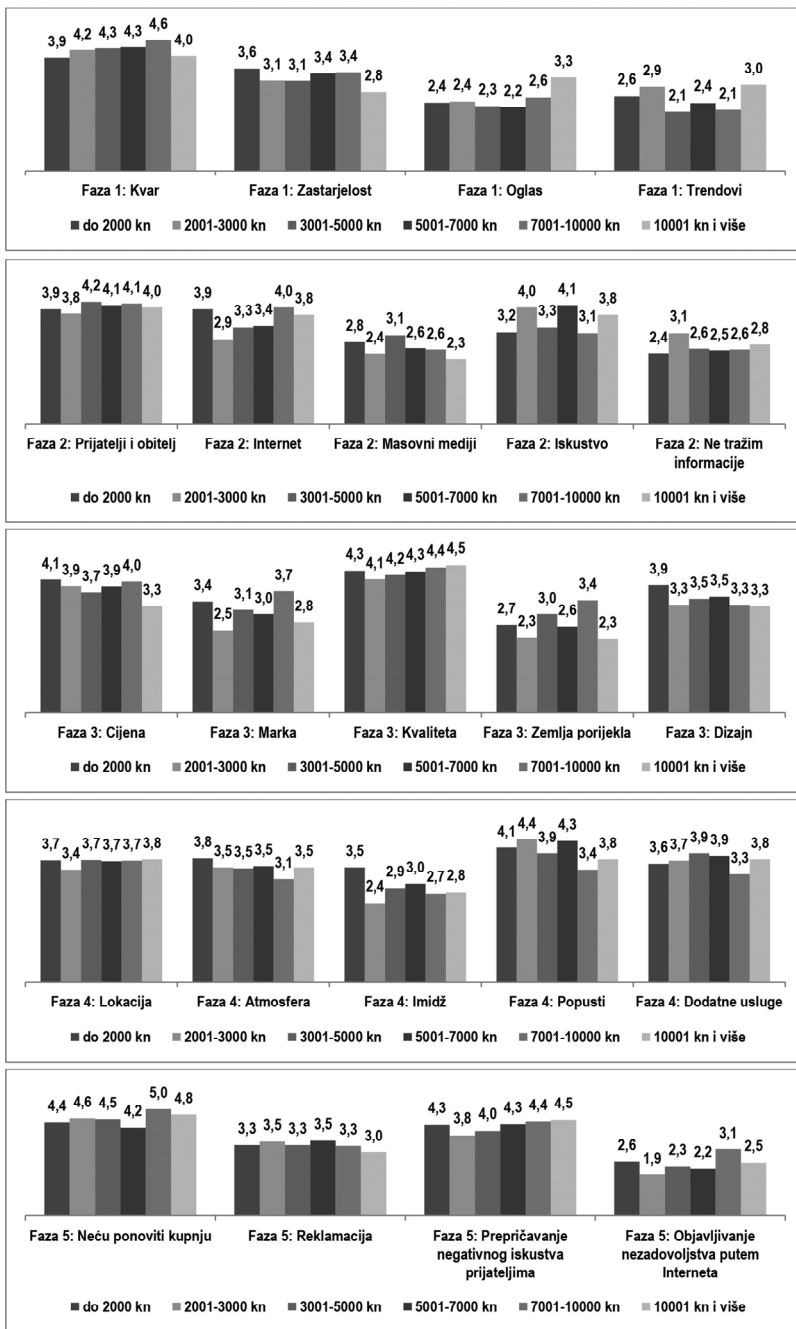


Slika 4. Utjecaj radnog statusa na proces donošenja odluke o kupovini, po fazama procesa

Rezultati ANOVA testa pokazuju da statistički signifikantna razlika u srednjim ocjenama između skupina ispitanika različitog radnog statusa postoji u prvoj, drugoj, trećoj i četvrtoj fazi procesa donošenja odluke o kupovini. U prvoj fazi statistički značajna razlika postoji u slučaju utjecaja zastarjelosti [$F(3,67)=7,136$, $p=0,000$] između studenata, zaposlenih i nezaposlenih s jedne strane i umirovljenika s druge strane, te oglasa [$F(3,67)=4,116$, $p=0,010$] između studenata i zaposlenih s jedne strane i umirovljenika s druge strane. U usporedbi s ostalim ispitanicima, umirovljenici znatno manju važnost pridaju zastarjelosti i oglasima kao poticajnim čimbenicima pri kupovini novog proizvoda. U drugoj fazi značajna razlika postoji u slučaju traženja informacija putem Interneta [$F(3,67)=20,124$, $p=0,000$] između studenata, zaposlenih i nezaposlenih s jedne strane i umirovljenika s druge strane. Umirovljenici znatno manju važnost pridaju Internetu prilikom informiranja o novom proizvodu. U trećoj fazi prilikom usporedbe proizvoda značajna razlika postoji u slučaju utjecaja cijene [$F(3,67)=2,96$, $p=0,038$] između studenata i zaposlenih s jedne strane i umirovljenika s druge strane, te dizajna proizvoda [$F(3,67)=3,327$, $p=0,025$] između studenata i umirovljenika. U usporedbi s ostalim ispitanicima, umirovljenici znatno veću važnost pridaju cijeni, a manju dizajnu proizvoda. U četvrtoj fazi prilikom odabira prodavaonice značajna razlika postoji u slučaju utjecaja imidža prodavaonice [$F(3,67)=3,999$, $p=0,011$] između studenata i nezaposlenih. Studenti znatno veću pažnju pridaju imidžu prodavaonice prilikom donošenja odluke gdje će obaviti kupnju.

3.2.5. Utjecaj osobnih prihoda na proces donošenja odluke o kupovini

Slika 5. prikazuje srednje ocjene tvrdnji vezanih uz faze procesa donošenja odluke o kupovini prema dohodovnim skupinama ispitanika. Vidljivo je da razlike u srednjim ocjenama postoje, ali su izrazito male i nekonzistentne. U prvoj fazi ispitanici s višim prihodima veću važnost pridaju oglasima i trendovima prilikom donošenja odluke o kupovini novog proizvoda. U drugoj fazi ispitanici s višim prihodima pridaju veću važnost informacijama prikupljenima putem Interneta. U trećoj fazi prilikom vrednovanja alternativa ispitanici s višim prihodima veću važnost pridaju kvaliteti, a manju dizajnu proizvoda. U četvrtoj i petoj fazi rezultati nisu konzistentni, zato se ne može dati jedinstveni zaključak. Rezultati ANOVA testa pokazuju da ne postoji statistički signifikantna razlika u srednjim ocjenama tvrdnji po fazama kupovnog procesa između različitih dohodovnih skupina ispitanika.



Slika 5. Utjecaj osobnog prihoda na proces donošenja odluke o kupovini, po fazama procesa

4. ZAKLJUČAK

Statistički testovi pokazuju da demografske karakteristike ispitanika utječu na proces donošenja odluke o kupovini, no ne u svim fazama procesa jednako. Utjecaj spola statistički je značajan u četvrtoj fazi kupovnog procesa čime je potvrđeno da su žene podložnije utjecaju atmosfere u prodavaonici. Utjecaj dobi statistički je značajan u prvoj, drugoj i četvrtoj fazi procesa donošenja odluke o kupovini iz čega slijedi da mlađi ispitanici veću važnost pridaju zastarjelosti proizvoda, oglasima i trendovima prilikom donošenja odluke o kupovini novog proizvoda; informacijama prikupljenima putem Interneta prilikom informiranja o proizvodu i imidžu prodavaonice prilikom odlučivanja o mjestu kupovine. Utjecaj obrazovanja statistički je značajan u prvoj, drugoj, trećoj i petoj fazi procesa donošenja odluke o kupovini iz čega slijedi da su obrazovaniji ispitanici podložniji utjecaju trendova prilikom prepoznavanja potrebe za novim proizvodom; da su skloniji tražiti informacije putem Interneta; da su manje podložni utjecaju cijene prilikom uspoređivanja proizvoda i da su manje skloni reklamirati proizvod s kojim su nezadovoljni. Utjecaj radnog statusa statistički je značajan u prvoj, drugoj, trećoj i četvrtoj fazi procesa donošenja odluke o kupovini. Umirovljenici se od ostalih ispitanika izdvajaju po tome što znatno manju važnost pridaju zastarjelosti i oglasima kao poticajnim čimbenicima pri kupovini novog proizvoda te Internetu prilikom informiranja o novom proizvodu. Prilikom usporedbe proizvoda, umirovljenici znatno veću važnost pridaju cijeni, a manju dizajnu proizvoda. Prilikom donošenja odluke gdje obaviti kupovinu studenti znatno veću pažnju pridaju imidžu prodavaonice u usporedbi s ostalim ispitanicima. Utjecaj osobnog prihoda ispitanika na proces donošenja odluke o kupnji nije statistički potvrđen.

Ponašanje potrošača i proces donošenja odluke o kupnji često su istraživane teme. Znanstveni doprinos ovog rada ogleda se u sveobuhvatnom pristupu prilikom istraživanja utjecaja demografskih karakteristika potrošača na ponašanje potrošača i donošenje odluke o kupovini. Provedeno istraživanje razlikuje se od istraživanja drugih autora po tome što je svaka faza procesa donošenja odluke o kupovini razmatrana zasebno. Na taj način moguće je bilo istražiti i donijeti zaključke utječu li, i kako, različiti demografski čimbenici na pojedine faze procesa donošenja odluke o kupovini. Uz znanstvenu vrijednost, dobiveni rezultati nude i važne implikacije za praksu tako što menadžerima u marketingu i trgovini na malo nude važna saznanja kako prilagoditi marketinšku i maloprodajnu strategiju ciljanoj demografskoj skupini potrošača.

Nekoliko je ograničenja postojećeg istraživanja koje je potrebno istaknuti. Prikupljen je relativno mali broj odgovora zbog čega je nemoguće generalizirati rezultate istraživanja na čitavu potrošačku populaciju u Republici Hrvatskoj. S druge strane, s obzirom da je prema saznanjima autora riječ o prvom istraživanju utjecaja demografskih karakteristika ispitanika na proces donošenja odluke o kupovini po faza procesa kupovine, rezultati nude važna preliminarna saznanja. Sljedeće ograničenje je sam način distribucije anketnog upitnika. S obzirom da je upitnik distribuiran putem Interneta samim time eliminirani su

ispitanici niže informatičke pismenosti. U budućim pokušajima provođenja istraživanja slične tematike svakako bi trebalo obratiti pozornost na način prikupljanja odgovora ispitanika. I kao posljednje ograničenje mogu se istaknuti usko kreirani dohodovni razredi zbog čega nije bilo moguće donijeti konzistentne zaključke o utjecaju prihoda ispitanika na proces donošenja odluke o kupovini.

Kao preporuka za buduća istraživanja slične tematike može se navesti proširenje opsega istraživanja na ispitivanje utjecaja socio-demografskih karakteristika ispitanika na proces donošenja odluke o kupovini, te razmotriti razlikuje li se njihov utjecaj ovisno o složenosti kupovne situacije, tj. ovisno o tome je li riječ o rutinskoj kupovini, limitiranom rješavanju problema ili ekstenzivnom rješavanju problema.

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THE IMPACT OF CONSUMER DEMOGRAPHICS ON CONSUMER DECISION-MAKING PROCESS

Abstract

*Consumer behaviour in the decision-making process is determined by many factors, and the aim of this paper is to explore the impact of demographic factors on the decision-making process. A primary research was conducted among Croatian consumers by submitting an online questionnaire. The purpose was to investigate whether and how consumer demographics such as gender, age, education, employment status and personal income affect the process of consumer decision-making. Scientific contribution of the paper is reflected in the fact that the buying process is studied by stages on the basis of which concrete conclusions and recommendations for retailers can be drawn how to adjust their retail strategy to targeted consumer segment. In the analysis, statistical tests *t*-test and ANOVA were used. The results show that the demographic characteristics of respondents influence the process of consumer decision-making, and that the impact differs not only between the characteristics but also between different phases of the buying process.*

Keywords: consumer behaviour, consumer decision-making process, consumer demographics

JEL classification: J10, M31

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TRANSPARENTNOST ŽUPANIJA U REPUBLICI HRVATSKOJ U PROVOĐENJU BAGATELNE NABAVE

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Sažetak

Svrha ovog rada bila je analizirati sadržaj službenih mrežnih stranica hrvatskih županija, s ciljem utvrđivanja transparentnosti u provođenju bagatelne nabave. Rezultati pokazuju da samo tri županije od ukupno dvadesetjedne županije na svojim mrežnim stranicama imaju postavljene Pozive za dostavu ponuda za sve postupke bagatelne nabave. Trinaest županija, na svojim mrežnim stranicama ne objavljuju Pozive za dostavu ponuda, što ih čini netransparentnim u pogledu realizacije bagatelne nabave. Dok preostalih pet županija, na svojim mrežnim stranicama djelomično objavljuju Pozive za dostavu ponuda, međutim njihova transparentnost u realizaciji bagatelne nabave nije dovoljna, jer ostaje veliki iznos novaca ispod pragova koji su oni odredili kao granicu za objavu na mrežnim stranicama koji će se potrošiti u netransparentnim postupcima. Rezultati istraživanja pokazuju da 54.315.594,99 kn, bagatelne nabave neće biti objavljeno na mrežnim stranicama županija, te za istu zainteresirani gospodarski subjekti neće moći dostaviti ponudu.

Ključne riječi: transparentnost, provođenje, bagatelna nabava, mrežna stranica, županija.

1. UVOD

Trećina novca koji se slijeva u državni proračun troši se kroz sustav javne nabave, koji je u Republici Hrvatskoj takav da je u Antikorupcijskom izvješću Europskog parlamenta (Europska komisija, 2014) Republika Hrvatska svrstana među najkorumpiranije države Europske unije, s procjenom da se na razini godine u javnim nabavama gubi 74 milijuna eura. Strategijom suzbijanja korupcije za razdoblje od 2015. do 2020. godine javna nabava je identificirana kao jedna od najkritičnijih gospodarskih aktivnosti zbog korupcijskih rizika vezanih uz upravljanje javnim financijskim sredstvima. S obzirom da je ukupna vrijednost javne nabave u BDP-u za 2015. godinu, iznosila 12,14 %, odnosno 40.583.697.729,00 kn, od čega evidentirana bagatelna nabava iznosi 9.470.932.263 kn, od iznimne je važnosti, da načelo transparentnosti bude među temeljnim načelima provođenja postupaka nabave.

Sustav javne nabave predstavlja skup propisa i pravila koji državi, njenim tijelima i tijelima s javnim ovlastima propisuju određene postupke prilikom kupnje roba i usluga obzirom da tijela s javnim ovlastima ne stječu samostalno financijska sredstva, uz pridržavanje temeljnih načela javne nabave: načelo slobode kretanja roba, načelo slobode poslovnog nastana, načelo slobode pružanja usluga, te načela koja iz toga proizlaze kao što su: načelo tržišnog natjecanja, načelo učinkovitosti, načelo jednakog tretmana, načelo zabrane diskriminacije, načelo uzajamnog priznavanja, načelo razmjernosti i načelo transparentnosti. Istraživanje je ograničeno samo na bagatelnu nabavu jer procedura provođenje iste nije regulirana zakonom o javnoj nabavi. Procedura provođenja svih ostalih postupaka nabave propisana je zakonom o javnoj nabavi, kojom se isti objavljuju putem Elektroničkog oglasnika javne nabave, internetske platforme Narodnih novina, te takvom objavom su dostupni cjelokupnoj javnosti i svim zainteresiranim dionicima u cijelom svijetu, čime je zakonom o javnoj nabavi zajamčena transparentnost u objavi i mogućnosti sudjelovanja u nadmetanju.

Osnovna svrha ovog rada bila je utvrditi sadržaj službenih mrežnih stranica županija u Republici Hrvatskoj. Osnovni cilj je bio utvrditi postoji li i u kojoj je mjeri zastupljen sadržaj koji se odnosi na bagatelnu nabavu na službenim mrežnim stranicama županija u Republici Hrvatskoj, te na temelju provedenog istraživanja utvrditi da li županije u Republici Hrvatskoj transparentno provode bagatelnu nabavu.

U radu se nastoji odgovoriti na sljedeća istraživačka pitanja:

1. Što je to bagatelna nabava?
2. Da li službene mrežne stranice pružaju dovoljno informacija za provođenje transparentne bagatelne nabave (postoji li na mrežnoj stranici dokument: Plan nabave za 2016. godinu, Pravilnik o bagatelnoj nabavi, poziv za dostavu ponuda za predmete bagatelne nabave)?
3. Da li su županije u Republici Hrvatskoj transparentne u provođenju bagatelne nabave?

Kako bi se odgovorilo na postavljena istraživačka pitanja i ostvario postavljeni cilj, te utvrdila transparentnost županija u provođenju bagatelne nabave definirana je sljedeća hipoteza:

H1: Županije u Republici Hrvatskoj transparentno provode bagatelnu nabavu.

Kao mjerilo za određivanje transparentnosti, odnosno netransparentnosti županija uzeta je objava poziva za dostavom ponuda u postupcima bagatelne nabave na službenim mrežnim stranicama. Navedeno mjerilo je uzeto iz razloga što su objave na mrežnim stranicama za naručitelja najjednostavnije, najbrže i najjeftinije rješenje u odnosu na objavu kroz sustav elektroničkog oglasnika javne nabave Narodnih novina ili objave u drugim medijima. Objavom poziva za dostavom ponuda na vlastitim mrežnim stranicama, naručitelj pozive za dostavom ponuda čini trenutno dostupnim svim zainteresiranim subjektima u svijetu, čime poštuje načelo tržišnog natjecanja i načelo transparentnosti.

Zakonom o javnoj nabavi (NN br. 90/11, 83/13, 143/13 i 13/14), (u daljnjem tekstu Zakon o javnoj nabavi), člankom 20. stavak 2. propisano je da se za bagatelne predmete nabave čija je procijenjena vrijednost jednaka ili veća od 20.000,00 kn, a manja od 200.000,00 kn za robe i usluge odnosno 500.000,00 kn za radove, u Plan nabave unose podaci o predmetu nabave i procijenjenoj vrijednosti nabave, sa svrhom transparentnosti plana nabave. Transparentnost županija mjerena je na ljestvici:

1. transparentne (objavljuju na mrežnim stranicama pozive za dostavu ponuda u predmetima bagatelne nabave jednake/veće od 20.000,00 kn)
2. djelomično transparentne (objavljuju na mrežnim stranicama pozive za dostavu ponuda u predmetima bagatelne nabave jednake/veće od 70.000,00 kn)
3. netransparentne (neobjavljuju na mrežnim stranicama pozive za dostavu ponuda u predmetima bagatelne nabave)

Za potrebe istraživanja u ovom radu korištena je metoda analize sadržaja. Za potrebe utvrđivanja koji su sadržaji vezani uz bagatelnu nabavu prisutni na službenim mrežnim stranicama hrvatskih županija, oblikovan je obrazac za prikupljanje podataka, kojim se je pokušalo utvrditi točnost postavljene hipoteze. Podaci korišteni u ovom radu su prikupljeni iz različitih izvora kao što su domaća i strana znanstvena i stručna literatura, zakonski i podzakonski akti, izvješća i službene mrežne stranice hrvatskih županija.

U radu se prikazuju rezultati provedenog empirijskog istraživanja transparentnosti provođenja bagatelne nabave hrvatskih županija, dobiveni analizom objavljenih dokumenata na njihovim službenim mrežnim stranicama.

Očekuje se kako će rezultati ovog istraživanja proširiti postojeće spoznaje o sadržaju službenih mrežnih stranica hrvatskih županija, te pridonijeti njihovim ovlaštenim zakonskim zastupnicima u rješavanju problema transparentnosti provođenja bagatelne nabave.

Rad se satoji od nekoliko poglavlja. Nakon uvodnog dijela, slijedi definiranje bagatelne nabave i njezino mjesto u javnim nabavama u Republici Hrvatskoj. Nakon definiranja bagatelne nabave, prikazana je teorijska osnova u kojoj je naveden kratki pregled dosadašnjih istraživanja stranih i domaćih autora u vezi koncepta povezanosti korupcije i nabave, te sadržaja mrežnih stranica u drugim djelatnostima i potrebe transparentnosti lokalnih zajednica u svom djelovanju. Zatim slijedi analiza sadržaja službenih mrežnih stranica županija, kroz opis metodologije istraživanja, te prikaz rezultata istraživanja. Na kraju rada prikazani su zaključci istraživanja, navedena su ograničenja i predložene smjernice za buduća istraživanja, te dane preporuke u svrhu rješavanja netransparentne nabave.

2. BAGATELNA NABAVA U REPUBLICI HRVATSKOJ

Sustav javnih nabava u Republici Hrvatskoj reguliran je Zakonom o javnoj nabavi, te je formalno usuglašen sa kriterijima zakonodavstva o javnim nabavama Europske Unije.

Procedura provedba javnih nabava u Republici Hrvatskoj je propisana Zakonom o javnoj nabavi, dok je određivanje procedure provedbe bagatelne nabave, od 2013. godine, zakonodavac prebacio u nadležnost svakog pojedinog naručitelja, tako Članak 18. stavak 3. Zakona o javnoj nabavi, propisuje:

"Ovaj Zakon ne primjenjuje se za nabavu robe i usluga procijenjene vrijednosti do 200.000,00 kuna, odnosno za nabavu radova do 500.000,00 kuna, a pitanja nabave do tih vrijednosti uređuje naručitelj svojim aktom".

Navedeni pragovi, člankom 18. stavkom 3. Zakona o javnoj nabavi, ispod kojih javni naručitelji nisu obvezni primijeniti Zakon o javnoj nabavi, nalaze se između onih u Sloveniji i Italiji koji iznose 20.000,00 eura za nabavu roba i usluga te 40.000,00 eura za radove, i Slovačkih gdje pragovi iznose 30.000,00 eura za robe i usluge te 120.000,00 eura za nabavu radova.

Izmjenama Članka 18. stavka 3. Zakona o javnoj nabavi, u 2013. godini, zakonodavac je naložio naručiteljima da sami svojim internim aktom uredi proceduru provedbe bagatelne nabave. Iako zakonodavac u Zakonu o javnoj nabavi nije eksplicitno naveo da od naručitelja očekuje transparentnost u provedbi bagatelne nabave, od naručitelja se očekuje provedba pravednih, nepristranih i nediskriminirajućih postupaka bagatelne nabave, koji jamče transparentnost.

Zbog potrebe za što većom transparentnošću, zakonodavac je propisao člankom 20. stavkom 2. Zakona o javnoj nabavi, da su Naručitelji dužni u Plan nabave kao dokument kojim se unaprijed obavještava gospodarske subjekte o svojim potrebama u određenom razdoblju, upisati sve bagatelne nabave čija je procijenjena vrijednost jednaka ili veća od 20.000,00 kn, a manja od 200.000,00 kn za robe i usluge odnosno 500.000,00 kn za radove.

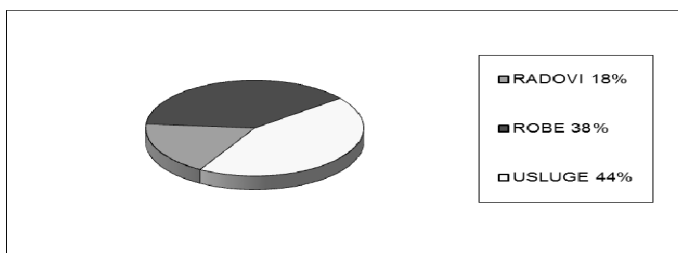
Ukupna vrijednost javne nabave u 2015. godini iznosila je 40.583.697.729,00 kn. Ukupna vrijednost objavljenih ugovora i okvirnih sporazuma u 2015. godini iznosila je 31.110.563.170,00 kn a vrijednost evidentirane bagatelne nabave je 9.470.932.263 kn (u 2004. godini- 9.277.951.667,00 kn), a kako je prikazno u Tablici 1. i Grafikonu 1. Ukupna vrijednost bagatelne nabave bilježi rast od 2,08% u odnosu na 2014. godinu.

Tablica 1.

Bagatelna nabava u iznosima za 2015. godinu, u Republici Hrvatskoj

Predmet nabave	Ukupna vrijednost nabave (s PDV-om)
Radovi	1.682.657.187,00 kn
Robe	3.638.126.232,00 kn
Usluge	4.150.148.844,00 kn
UKUPNO:	9.470.932.263,00 kn

Izvor: Izradili autori (podaci iz Statističko izvješće o javnoj nabavi u Republici Hrvatskoj za 2015. godinu).



Grafikon 1. Bagatelna nabava po predmetima nabave u postocima za 2015. godinu, u Republici Hrvatskoj

Izvor: Izradili autori (podaci iz Statističko izvješće o javnoj nabavi u Republici Hrvatskoj za 2015. godinu).

3. TEORIJSKA OSNOVA

U znanstvenim istraživanjima strani i domaći autori sadržaj mrežnih stranica proučavaju s konceptualnog i empirijskog stajališta, kvalitativnog i kvantitativnog stajališta u okviru određene djelatnosti (elektroničkih usluga, hotelskih sadržaja, osiguranja, konditorske djelatnoszi i trgovine na malo), te sa stajališta povezanosti s drugim konceptima (koncept korupcije u javnim nabavama i njenog utjecaja na politički reizbor, koncept proračunske transparentnosti lokalnih jedinica i koncept zaduživanja jedinica lokalne samouprave), dok istraživanje sadržaja mrežnih stranica u funkciji transparentnosti bagatelne nabave u Republici Hrvatskoj ne postoji, zbog čega je opravdano provesti ovo istraživanje.

Strani autori koncept sadržaja mrežnih stranica su istraživali u različitim djelatnostima, tako su (Zeithaml et al., 2000) izradili E-S-QUAL model za mjerenje kvalitete usluge koja se pruža elektroničkim putem, u kojem je identificirano čak jedanaest dimenzija kvalitete. Dvije godine kasnije, isti autori su ponudili novu inačicu konceptualnog modela za vrednovanje i unaprjeđenje kvalitete elektroničkih usluga, koja se sada sastoji od pet dimenzija: dostupnost informacija i sadržaja, jednostavnost uporabe, privatnost/sigurnost, izgled/grafički dizajn te učinkovitost i pouzdanost. Pored prethodno navedenih dimenzija, brojni drugi autori također navode različite kriterije koje je potrebno razmotriti prilikom određivanja kvalitete mrežnih stranica. Tako, (Zhuang i Lederer, 2003) navode slijedeće kriterije: poslovni ciljevi mrežnih stranica, sadržaj mrežnih stranica, funkcije mrežnih stranica i kriteriji procjene.

Turisti očekuju da mrežne stranice budu informativne, interaktivne i atraktivne (Chu, 2001). One moraju biti kreirane tako da odgovore na potrebe korisnika. Prema istraživanju (Chaiprasit et al., 2011) najvažnije informacije za turiste su trenutne pouzdane informacije i korisne dostatne informacije o turističkim proizvodima/uslugama i putnim sadržajima, uključujući detaljnu i sveobuhvatnu pokrivenost informacija o turističkom putovanju.

Osim analize mrežnih stranica u hotelskoj industriji, strani autori (Čičić et al., 2005) istražuju i kvalitetu usluga mrežnih stranica na primjeru osiguravajućih društava u Bosni i Hercegovini.

Domaći autori, (Ružić et al., 2009) navode slijedeće kriterije koje je potrebno razmotriti prilikom određivanja kvalitete mrežne stranice: tehničke karakteristike poslužitelja i mrežne stranice, iskoristivost i pristupačnost mrežne stranice i kvalitetu sadržaja.

Istraživanje o važnosti sadržaja objavljenog na mrežnim stranicama hotela prilikom odabira smještaja pokazalo je da su turistima najvažnije informacije o cijenama, načinu plaćanja i slike hotela (Kraljić i Lončarić, 2015).

Na području Republike Hrvatske do sada je provedeno svega nekoliko istraživanja kvalitete mrežnih stranice hotela, a osim gore navedenih istraživanja, svakako valja istaknuti istraživanja mrežnih stranice hotela i ostalih autora (Galičića i Šimunića, 2010; Andrića, 2012; Grgone et al., 2008; Spremića i Strugara, 2008; Marković et al., 2012).

Također, domaći autori istražuju upotrebu mrežnih stranica unutar trgovine na malo te konditorske industrije. U trgovina na malo (Knežević, 2006) istaknula je brojne prednosti web-a kao kanala distribucije, međutim utvrđuje da je praksa pokazala da web nije toliko snažan kanal distribucije koliko se smatralo da je, te da se isti može koristiti samo kao dodatni komunikacijski i distribucijski kanal. Navedeno je prikazala na primjeru najvećih europskih maloprodajnih tvrtki za ciglu i mort kako koriste web u poslovne svrhe. Također, (Knežević et al., 2007) istražuju web kao kanala distribucije, te u radu objašnjavaju kako su najveće europske maloprodajne tvrtke za ciglu i mort strukturirale svoje web čineći ga korisnim svojim kupcima. U konditorskoj industriji (Knežević et al., 2011) istražuju razinu uporabe internet stranica unutar konditorske

industrije u jugoistočnoj Europi, s ciljem ispitivanja utjecaja lokacije i veličine tvrtke na kvalitetu sadržaja objavljenih na internet stranicama. Osim koncepta istraživanja sadržaja mrežnih stranica, strani i domaći autori, te Europska komisija, istraživali su i koncept korupcije u javnim nabavama i njenog utjecaja na politički reizbor, te koncept proračunske transparentnosti lokalnih jedinica.

Antikorupcijsko istraživanje (Europska komisija, 2014) o korupciji u svih 28 članica Europske unije identificiralo je netransparentnost praksi javnih nabava kao treće temeljno izvorište korupcije u zemljama članicama, naročito na lokalnoj razini vlasti. Ističu da su poduzeća u javnom vlasništvu posebice netransparentna prilikom potpisivanja ugovora o javnim nabavama što je potencirano politizacijom pozicija njihovih čelnih ljudi. Prevelika diskrecijska moć političara, službenika ili uprava/direktora javnih poduzeća direktna su motivacija za koruptivno djelovanje. U istom istraživanju ističe se da je 2010. trošak korupcije u javnim nabavama kroz pet industrijskih sektora u samo osam zemalja članica procijenjen između 1,4 i 2,2 milijarde eura. Izvješće ističe da je ukupna šteta od korupcije u Europskoj uniji veličini jednako godišnjem EU proračunu. Također, navodi se da 64% hrvatskih tvrtki smatra da je korupcija iznimno velika u procesima javnih nabava, naročito ako ih vode lokalne vlasti.

Strani autori koncept korupcije u javnim nabavama definiraju kao oblik zloupotrebe moći političara na vlasti koja je ograničavajući faktor rasta mnogih modernih demokracija (Mauro, 1995; Knack i Keefer, 1995). Političke elite na državnoj i/ili lokalnoj razini manipuliraju javnim sredstvima za ostvarenje parcijalnih i privatnih interesa, radi ostvarenja dvaju temeljnih ciljeva svoje vladavine: ostanak na vlasti te povećanje vlastita bogatstva za vrijeme obnašanja vlasti (Bueno de Mesquita et al., 2002).

Domaći autori o konceptu korupcije u javnim nabavama navode da u Republici Hrvatskoj vlada uska povezanost poslovne zajednice i političara, te da su odluke u javnoj nabavi obično diskrecijske i često koncentrirane u vrlo uskom krugu ljudi, naročito u lokalnoj samoupravi (Ateljević i Budak, 2010; Bađun, 2011).

Kroz istraživanje (Ateljević i Budak, 2010) ističu da su cijene u javnim nabavama i dalje više od tržišnih, kako se često ne objavljuju otvoreni postupci već se natječaji alociraju direktno, bez prethodne objave natječaja, te kako se često uključuju nepotrebni troškovi i usluge koje povećavaju vrijednost ugovora.

Također, istraživana je i korupcija u javnim nabavama i posljedice na politički reizbor, na primjeru lokalne samouprave u Hrvatskoj, pri čemu je testirana povezanost koruptivnih praksi javnih nabava u Hrvatskoj s vjerojatnošću reizbora lokalnih političara, koristeći uzorak javnih nabava na lokalnoj razini u Hrvatskoj u razdoblju 2009.-2010. godine (Vuković, 2014). Kroz istraživanje je potvrđena hipoteza da zbog povezanih interesa lokalnih poduzetnika i političkih elita, političari na lokalnoj vlasti u Republici Hrvatskoj mogu do određene razine pobjeđivati na izborima bez smanjenja opsega svog koruptivnog djelovanja, štoviše imaju veće šanse za reizbor ukoliko stvaraju sustav koji potiče korupciju.

Također, analizirana je proračunska transparentnosti lokalnih jedinica (županija, gradova i općina), koja je mjerena brojem ključnih proračunskih dokumenata (godišnjem izvršenju za 2014., polugodišnjem izvršenju za 2015., te prijedlogu proračuna, izglasanom proračunu i proračunu za građane za 2016), objavljenih na njihovim službenim mrežnim stranicama od studenog 2015. do ožujka 2016. godine (Ott et al., 2016). U obzir su uzeti samo dokumenti koji su bili dostupni u navedenom razdoblju i to na dan pretraživanja mrežne stranice, ali ne i naknadno objavljeni dokumenti. Takvim izračunom, određeno je da razina proračunske transparentnosti može iznositi od 0 do 5. Prosječna transparentnost proračuna svih lokalnih jedinica je nezadovoljavajuća, ali se popravlja, s 1.75 iz istraživanja iz prijašnjih godina, na 2.35 u ciklusu istraživanja 2016. godine. Istraživanje je pokazalo da su županije vrlo transparentne (prosjek 4.3) u prikazivanju proračunskih dokumenata. Osim koncepta proračunske transparentnosti lokalnih jedinica, potrebno je navesti i koncept zaduživanje jedinica lokalne samouprave u Hrvatskoj (Bajo i Primorac, 2010), koji prikazuju financijski položaj jedinica lokalne samouprave prema veličini i strukturi njihovih bruto i neto dugova. Zaključuju da se izvori potencijalne financijske nestabilnosti i rizici kreditne sposobnosti lokalne uprave mogu naći u financijskim poslovima komunalnih poduzeća, koji mogu dovesti do netransparentnosti u financijskom poslovanju.

4. ANALIZA SADRŽAJA SLUŽBENIH MREŽNIH STRANICA ŽUPANIJA

Analiza sadržaja službenih mrežnih stranica županija prikazana je u nastavku ovog poglavlja kroz sljedeća točke: metodologija istraživanja i rezultati istraživanja.

4.1. Metodologija istraživanja

Empirijsko istraživanje sadržaja službenih mrežnih stranica županija u Republici Hrvatskoj provedeno je u razdoblju od 10. do 14. studenog 2016. godine. Istraživanje je provedena na cjelokupnoj statističkoj masi tj. obuhvatilo je sve županije u Republici Hrvatskoj.

U istraživanju je primijenjena metoda analize sadržaja. Analiza sadržaja definirana je kao metoda istraživanja namijenjena subjektivnoj interpretaciji sadržaja tekstualnih podataka kroz sustavnu klasifikaciju procesa kodiranja i identificiranja stavki ili uzoraka (Hsieh i Shannon, 2005). Prema, (Kolbe i Burnett, 1991) analiza sadržaja je metoda promatranja koja se koristi za sustavnu evaluaciju simboličkog sadržaja svih oblika zabilježene komunikacije. Omogućuje znanstveni, objektivni, kvantitativni i generalizirajući opis sadržaja.

Kako bi se utvrdilo koji su sadržaji prisutni na službenim mrežnim stranicama hrvatskih županija a potrebni za utvrđivanje transparentnosti bagatelne nabave, izrađena su 4 (četiri) pitanja, koja glase:

1. Postoji li na mrežnoj stranici dokument Plan nabave za 2016. godinu?
2. Postoji li na mrežnoj stranici dokument Pravilnik o bagatelnoj nabavi, te koji su pragovi za objavu na mrežnim stranicama?
3. Postoji li na mrežnoj stranici poziv za dostavu ponuda za predmete bagatelne nabave?
4. Iznos bagatelne nabave ispod pragova propisanih Procedurom bagatelne nabave, za objavu na mrežnim stranicama?

Rezultati na pitanje broj 3. daju odgovor na postavljenu hipotezu, dok odgovori na pitanja broj 1. i 2. daju mogućnost da se izračuna iznos, koji je ujedno odgovor na pitanje broj 4.

4.2. Rezultati istraživanja

Rezultati provedenog istraživanja prikazani su u nastavku ovog poglavlja kroz pojedinačne tablice vezane uz svako pojedino pitanje.

Pitanje 1: Postoji li na mrežnoj stranici dokument Plan nabave za 2016. godinu?

Tablica 2.

Red. Br.	Županija	Postoji li na mrežnoj stranici dokument Plan nabave za 2016. godinu?
1	BJELOVARSKO BILOGORSKA	DA
2	BRODSKO POSAVSKA	DA
3	DUBROVAČKO NERETVANSKA	DA
4	GRAD ZAGREB	DA
5	ISTARSKA	DA
6	KARLOVAČKA	DA
7	KOPRIVNIČKO KRIŽEVAČKA	DA
8	KRAPINSKO ZAGORSKA	DA
9	LIČKO SENJSKA	DA
10	MEĐIMURSKA	DA
11	OSJEČKO BARANJSKA	DA
12	POŽEŠKO SLAVONSKA	DA
13	PRIMORSKO GORANSKA	DA
14	SISAČKO MOSLAVČKA	DA
15	SPLITSKO DALMATINSKA	DA
16	ŠIBENSKO KNINSKA	DA
17	VARAŽDINSKA	DA
18	VIROVITIČKO PODRAVSKA	DA
19	VUKOVARSKO SRIJEMSKA	DA
20	ZADARSKA	DA
21	ZAGREBAČKA	DA

Izvor: Izradili autori

Iz analize mrežne stranice svake pojedine županije i prikazanih odgovora u Tablici 2. vidljivo je kako sve županije na svojim mrežnim stranicama imaju dokument Plan nabave za 2016. godinu. Sukladno članku 20. stavak 4. Zakona o javnoj nabavi, svi javni naručitelji obvezni su plan nabave objaviti na internetskim stranicama u roku 60 dana od dana donošenja proračuna, odnosno financijskog plana. Također, sve izmjene i dopune plana nabave javni naručitelj dužan je odmah objaviti na svojim internetskim stranicama.

Pitanje 2: Postoji li na mrežnoj stranici dokument, Pravilnik o bagatelnoj nabavi, te koji su pragovi za objavu na mrežnim stranicama?

Tablica 3.

Red. Br.	Županija	Postoji li na mrežnoj stranici dokument Pravilnik o bagatelnoj nabavi, te koji su pragovi za objavu na mrežnim stranicama?
1	BJELOVARSKO BILOGORSKA	NE
2	BRODSKO POSAVSKA	DA / objave na web \geq 70.000,00 kn
3	DUBROVAČKO NERETVANSKA	DA / nema obveze objave na web
4	GRAD ZAGREB	DA / nema obveze objave na web
5	ISTARSKA	DA / nema obveze objave na web
6	KARLOVAČKA	DA / objave na web \geq 70.000,00 kn
7	KOPRIVNIČKO KRIŽEVAČKA	DA / nema obveze objave na web
8	KRAPINSKO ZAGORSKA	DA / nema obveze objave na web
9	LIČKO SENJSKA	DA / nema obveze objave na web
10	MEDIMURSKA	DA / nema obveze objave na web
11	OSJEČKO BARANJSKA	DA / objave na web \geq 10.000,00 kn
12	POŽEŠKO SLAVONSKA	DA / objave na web \geq 70.000,00 kn
13	PRIMORSKO GORANSKA	NE
14	SISAČKO MOSLAVČKA	DA / objave na web \geq 100.000,00 kn
15	SPLITSKO DALMATINSKA	DA / objave na web \geq 20.000,00 kn
16	ŠIBENSKO KNINSKA	DA / nema obveze objave na web
17	VARAŽDINSKA	DA / objave na web \geq 100.000,00 kn
18	VIROVITIČKO PODRAVSKA	DA / nema obveze objave na web
19	VUKOVARSKO SRIJEMSKA	DA / nema obveze objave na web
20	ZADARSKA	DA / objave na web \geq 70.000,00 kn
21	ZAGREBAČKA	DA / objave na web \geq 70.000,00 kn

Izvor: Izradili autori

Iz analize mrežne stranice svake pojedine županije i prikazanih odgovora u Tablici 3. vidljivo je da je 19 (devetnaest) županija objavilo Pravilnik o provođenju bagatelne nabave. Iz Pravilnika o bagatelnoj nabavi vidljivo je da 10 (deset) županija u svom Pravilniku ne obvezuje provoditelje bagatelne nabave da

Poziv za dostavu ponuda objavljuju na mrežnim stranicama. Ostalih 9 (devet) županija koje su na svojim mrežnim stranicama objavile Pravilnik o bagatelnoj nabavi, u njima su odredili pragove, iznad kojih procijenjenih vrijednosti nabave, službe koje provode bagatelnu nabavu su dužne objaviti Pozive za dostavu ponuda na svojim mrežnim stranicama. Najniži prag procijenjene vrijednosti nabave iznad kojeg objavljuje Poziv za dostavu ponuda u postupcima bagatelne nabave ima Osječko-baranjska županija, koji iznosi 10.000,00 kn.

Korištenjem funkcije „pretraživanje mrežne stranice“ kod 2 (dvije) županije je pronađeno mnoštvo drugih dokumenata i internih akata, ali Pravilnik o provođenju bagatelne nabave nije pronađen, iz čega se može zaključiti da isti nije ni izrađen ni usvojen od strane županije.

Pitanje 3: Postoji li na mrežnoj stranici poziv za dostavu ponuda za predmete bagatelne nabave?

Tablica 4.

Red. Br.	Županija	Postoji li na mrežnoj stranici poziv za dostavu ponuda za predmete bagatelne nabave?
1	GRAD ZAGREB	DA
2	OSJEČKO BARANJSKA	DA
3	SPLITSKO DALMATINSKA	DA

Izvor: Izradili autori

Iz analize mrežne stranice svake pojedine županije i prikazanih odgovora u Tablici 4. vidljivo je da Grad Zagreb, Osječko-baranjska i Splitsko-dalmatinska županija, na svojim mrežnim stranicama imaju postavljene Pozive za dostavu ponuda u postupcima bagatelne nabave, čija je procijenjena vrijednost jednaka ili veća od 20.000,00 kn.

Grad Zagreb, iako u svojem Pravilniku o bagatelnoj nabavi je propisao da stručne službe koje provode bagatelnu nabavu nemaju obvezu objave poziva za nadmetanje na službenim mrežnim stranicama, isti objavljuje sve pozive za dostavom ponuda u postupcima bagatelne nabave. Također, osim Grada Zagreba i Osječko-baranjska i Splitsko-dalmatinska županija objavljuju pozive koji imaju i manje procijenjene vrijednosti nabave nego što su propisale svojim pravilnicima o bagatelnoj nabavi, što ih čini u potpunosti transparentnim u pogledu realizacije bagatelne nabave.

Tablica 5.

Red. Br.	Županija	Postoji li na mrežnoj stranici poziv za dostavu ponuda za predmete bagatelne nabave?
1	BJELOVARSKO BILOGORSKA	NE
2	DUBROVAČKO NERETVANSKA	NE
3	ISTARSKA	NE
4	KOPRIVNIČKO KRIŽEVAČKA	NE
5	KRAPINSKO ZAGORSKA	NE
6	LIČKO SENJSKA	NE
7	MEĐIMURSKA	NE
8	POŽEŠKO SLAVONSKA	NE
9	PRIMORSKO GORANSKA	NE
10	SISAČKO MOSLAVAČKA	NE
11	ŠIBENSKO KNINSKA	NE
12	VIROVITIČKO PODRAVSKA	NE
13	VUKOVARSKO SRIJEMSKA	NE

Izvor: Izradili autori

Bjelovarsko-bilogorska i Primorsko-goranska županija, na svojim mrežnim stranicama sukladno rezultatima iz Tablice 3. nemaju Pravilnik o bagatelnoj nabavi a ni Pozive za dostavu ponuda u postupcima bagatelne nabave, kako je prikazano u Tablici 5.

Požeško-slavonska županija, iako u svome Pravilniku o bagatelnoj nabavi ima obvezu objave Poziva za dostavu ponuda na mrežnim stranicama, kad je procjenjena vrijednost nabave veća od 70.000,00 kn, na svojim mrežnim stranicama nema postavljene Pozive za dostavu ponuda u postupcima bagatelne nabave.

Ostale županije iz Tablice 3. po Pravilniku o bagatelnoj nabavi, nemaju obvezu objave Poziva za nadmetanje na službenim mrežnim stranicama, te iste i ne objavljuju, a što ih čini netransparentnim u pogledu realizacije bagatelne nabave.

Tablica 6.

Red. Br.	Županija	Postoji li na mrežnoj stranici poziv za dostavu ponuda za predmete bagatelne nabave?
1	BRODSKO POSAVSKA	DA
2	KARLOVAČKA	DA
3	VARAŽDINSKA	DA
4	ZADARSKA	DA
5	ZAGREBAČKA	DA

Izvor: Izradili autori

Karlovačka, Zagrebačka, i Varždinska županija sukladno svojim Pravilnicima o bagatelnoj nabavi, obvezale su se objavljivati sve Pozive za dostavom ponuda čija je procijenjena vrijednost nabave veća od 70.000,00 kn, odnosno 100.000,00 kn, što iste i čine.

Brodsko-posavska i Zadarska županija sukladno svom Pravilniku o bagatelnoj nabavi, obvezale su se objavljivati sve Pozive za dostavom ponuda čija je procijenjena vrijednost nabave veća od 70.000,00 kn. Na mrežnim stranicama Brodsko-posavske županije na dan 11. studeni 2016. godine, su vidljiva 2 (dva) Poziva za dostavom ponuda u postupcima bagatelne nabave (Usluga mobilne telefonije, Izrada Županijske razvojne strategije), a pregledom Plana nabave za 2016. godine, je vidljivo da do studenog 2016. godine u planu postoji više od 2 (dva) predmeta bagatelne nabave koji imaju procijenjenu vrijednost nabave veću od 70.000,00 kn. Isti slučaj je i sa Zadarskom županijom, kod koje su također na dan 11. studeni 2016. godine, vidljiva 4 (četiri) Poziva za dostavom ponuda u postupcima bagatelne nabave (Nabava higijenske papirnate konfekcije i sredstava za čišćenje, Uredskog materijala, Nabava telekomunikacijskih usluga, Usluge čišćenja ureda), a pregledom Plana nabave za 2016. godine, je vidljivo da do studenog 2016. godine u planu postoji više od 4 (četiri) predmeta bagatelne nabave koji imaju procijenjenu vrijednost nabave veću od 70.000,00 kn.

Iako županije navedene u Tablici 6. objavljuju Pozive za dostavom ponuda u postupcima bagatelne nabave, sukladno vlastitom Pravilniku bagatelne nabave, i dalje je njihova transparentnost u realizaciji bagatelne nabave nedovoljna, jer ostaje velik broj predmeta nabave koji se ugovaraju netransparentno jer je njihova procijenjena vrijednost ispod pragova koje su oni odredili kao granicu za objavu na mrežnim stranicama, te iste možemo smatrati djelomično transparentnim u provođenju bagatelne nabave.

Pitanje 4: Iznos bagatelne nabave ispod pragova propisanih Procedurom bagatelne nabave, za objavu na mrežnim stranicama?

Tablica 7.

Red. Br.	Županija	Iznos bagatelne nabave ispod pragova propisanih Procedurom bagatelne nabave, za objavu na mrežnim stranicama
1	BJELOVARSKO BILOGORSKA	2.428.700,00 kn
2	BRODSKO POSAVSKA	2.594.174,69 kn
3	DUBROVAČKO NERETVANSKA	3.700.700,00 kn
4	GRAD ZAGREB	Objavljaju cijelu bagatelnu
5	ISTARSKA	7.475.338,00 kn
6	KARLOVAČKA	1.266.000,00 kn
7	KOPRIVNIČKO KRIŽEVAČKA	1.407.900,00 kn
8	KRAPINSKO ZAGORSKA	3.424.227,20 kn
9	LIČKO SENJSKA	1.094.800,00 kn
10	MEĐIMURSKA	2.259.885,00 kn
11	OSJEČKO BARANJSKA	Objavljaju cijelu bagatelnu
12	POŽEŠKO SLAVONSKA	2.086.190,00 kn
13	PRIMORSKO GORANSKA	4.894.948,67 kn
14	SISAČKO MOSLAVČKA	5.752.358,64 kn
15	SPLITSKO DALMATINSKA	Objavljaju cijelu bagatelnu
16	ŠIBENSKO KNINSKA	2.996.166,00 kn
17	VARAŽDINSKA	2.013.400,00 kn
18	VIROVITIČKO PODRAVSKA	1.775.286,79 kn
19	VUKOVARSKO SRIJEMSKA	2.826.770,00 kn
20	ZADARSKA	4.217.250,00 kn
21	ZAGREBAČKA	2.101.500,00 kn
SVEUKUPNO:		54.315.594,99 kn

Izvor: Izradili autori

U Tablici 7. prikazan je iznos bagatelne nabave za svaku pojedinu županiju, koji sukladno Pravilniku o bagatelnoj nabavi neće biti objavljen na mrežnim stranicama županija te za iste neće biti postavljen Poziv za dostavom ponuda na koji će ponudu moći dostaviti bilo koji od zainteresiranih gospodarskih subjekata već će Poziv za dostavom ponuda županije uputiti samo odabranim gospodarskim subjektima. Također u Tablici 7. je prikazan i sveukupni iznos za sve županije, koji po Planu nabave za 2016. godinu iznosi 54.315.594,99 kn.

Tablica 8.

Zbirni podaci odgovora po svim pitanjima sa stupnjem transparentnosti pojedine županije

Pitanja:

1. Postoji li na mrežnoj stranici dokument Plan nabave za 2016. godinu?
2. Postoji li na mrežnoj stranici dokument Pravilnik o bagatelnoj nabavi, te koji su pragovi za objavu na mrežnim stranicama?
3. Postoji li na mrežnoj stranici poziv za dostavu ponuda za predmete bagatelne nabave?
4. Iznos bagatelne nabave ispod praga propisanih Procedurom bagatelne nabave, za objavu na mrežnim stranicama?

PITANJA / ŽUPANIJE	1	2	3	4	Stupanj transparentnosti
BJELOVARSKO BILOGORSKA	DA	NE	NE	2.428.700,00	Netransparentne
BRODSKO POSAVSKA	DA	DA / objave na web ≥ 70.000,00 kn	DA	2.594.174,69	Djelomično transparentne
DUBROVAČKO NERETVANSKA	DA	DA / nema obveze objave na web	NE	3.700.700,00	Netransparentne
GRAD ZAGREB	DA	DA / nema obveze objave na web	DA	0,00	Transparentne
ISTARSKA	DA	DA / nema obveze objave na web	NE	7.475.338,00	Netransparentne
KARLOVAČKA	DA	DA / objave na web ≥ 70.000,00 kn	DA	1.266.000,00	Djelomično transparentne
KOPRIVNIČKO KRIŽEVAČKA	DA	DA / nema obveze objave na web	NE	1.407.900,00	Netransparentne
KRAPINSKO ZAGORSKA	DA	DA / nema obveze objave na web	NE	3.424.227,20	Netransparentne
LIČKO SENJSKA	DA	DA / nema obveze objave na web	NE	1.094.800,00	Netransparentne
MEDIMURSKA	DA	DA / nema obveze objave na web	NE	2.259.885,00	Netransparentne
OSJEČKO BARANJSKA	DA	DA / objave na web ≥ 10.000,00 kn	DA	0,00	Transparentne
POŽEŠKO SLAVONSKA	DA	DA / objave na web ≥ 70.000,00 kn	NE	2.086.190,00	Netransparentne
PRIMORSKO GORANSKA	DA	NE	NE	4.894.948,67	Netransparentne
SISAČKO MOSLAVČKA	DA	DA / objave na web ≥ 100.000,00 kn	NE	5.752.358,64	Netransparentne
SPLITSKO DALMATINSKA	DA	DA / objave na web ≥ 20.000,00 kn	DA	0,00	Transparentne
ŠIBENSKO KNINSKA	DA	DA / nema obveze objave na web	NE	2.996.166,00	Netransparentne
VARAŽDINSKA	DA	DA / objave na web ≥ 100.000,00 kn	DA	2.013.400,00	Djelomično transparentne
VIROVITIČKO PODRAVSKA	DA	DA / nema obveze objave na web	NE	1.775.286,79	Netransparentne
VUKOVARSKO SRIJEMSKA	DA	DA / nema obveze objave na web	NE	2.826.770,00	Netransparentne
ZADARSKA	DA	DA / objave na web ≥ 70.000,00 kn	DA	4.217.250,00	Djelomično transparentne
ZAGREBAČKA	DA	DA / objave na web ≥ 70.000,00 kn	DA	2.101.500,00	Djelomično transparentne
				54.315.594,99	

Izvor: Izradili autori

U Tablici 8. su prikazani zbirni podaci odgovora po svim pitanjima sa stupnjem transparentnosti pojedine županije.

Transparentnost županija mjerena je na ljestvici:

1. transparentne (objavljaju na mrežnim stranicama pozive za dostavu ponuda u predmetima bagatelne nabave jednake/veće od 20.000,00 kn)
2. djelomično transparentne (objavljaju na mrežnim stranicama pozive za dostavu ponuda u predmetima bagatelne nabave jednake/veće od 70.000,00 kn)
3. netransparentne (neobjavljaju na mrežnim stranicama pozive za dostavu ponuda u predmetima bagatelne nabave)

Iz Tablice 8. se može zaključiti da samo 3 (tri) županije (Grad Zagreb, Osječko-baranjska i Splitsko-dalmatinska), transparentno provode bagatelnu nabavu. Pet županija (Brodsko-posavska, Karlovačka, Varaždinska, Zadarska i Zagrebačka) sukladno ljestvici transparentnosti, su djelomično transparentne, dok ostale županije iz Tablice 8., se mogu smatrati nestransparentnim u provođenju bagatelne nabave. Iz Tablice 8. je vidljivo da će djelomično transparentne i nestransparentne županije, a sve sukladno važećim Pravilnicima o provedbi bagatelne nabave na netransparentan način potrošiti 54.315.594,99 kn.

5. ZAKLJUČAK

Osnovna svrha ovog rada bila je analizirati transparentnost provođenja bagatelne nabave hrvatskih županija. Upotrebom metoda analize ostvaren je cilj istraživanja te potvrđena postavljena hipoteza za tri županije, za trinaest županija postavljena hipoteza je odbačena, dok za preostalih pet županija postavljena hipoteza je djelomično potvrđena.

Sve županija, obvezne su plan nabave objaviti na internetskim stranicama u roku 60 dana od dana donošenja proračuna, što su iste i učinile. Pravilnik o provođenju bagatelne nabave, analiziranjem stranice i korištenjem funkcije „pretraživanje mrežne stranice“, nije pronađen kod Bjelovarsko-bilogorske i Primorsko-goranske županije, dok ostale županije imaju objavljen navedeni pravilnik.

Rezultati istraživanja pokazuju da samo Grad Zagreb, Osječko-baranjska i Splitsko-dalmatinska županija, na svojim mrežnim stranicama imaju postavljene Pozive za dostavu ponuda za sve postupke bagatelne nabave, i sa manjim procijenjenim vrijednostima nabave nego što su propisale svojim pravilnicima o bagatelnoj nabavi, što ih čini u potpunosti transparentnim u pogledu realizacije bagatelne nabave.

Karlovačka, Zagrebačka, i Varaždinska županija sukladno svojim Pravilnicima o bagatelnoj nabavi, obvezale su se objavljivati sve Pozive za dostavom ponuda čija procijenjena vrijednost nabave je veća od 70.000,00 kn, odnosno 100.000,00 kn, što iste i čine. Brodsko-posavska i Zadarska županija sukladno svom Pravilniku o bagatelnoj nabavi, obvezale su se objavljivati sve

Pozive za dostavom ponuda čija je procijenjena vrijednost nabave veća od 70.000,00 kn. Na mrežnim stranicama Brodsko-posavske županije na dan 11. studeni 2016. godine, su vidljiva 2 (dva) Poziva za dostavom ponuda u postupcima bagatelne nabave (Usluga mobilne telefonije, Izrada Županijske razvojne strategije), a pregledom Plana nabave za 2016. godine, je vidljivo da do studenog 2016. godine u planu postoji više od 2 (dva) predmeta bagatelne nabave koji imaju procijenjenu vrijednost nabave veću od 70.000,00 kn. Isti slučaj je i sa Zadarskom županijom, kod koje su također na dan 11. studeni 2016. godine, vidljiva 4 (četiri) Poziva za dostavom ponuda u postupcima bagatelne nabave (Nabava higijenske papirnate konfekcije i sredstava za čišćenje, Uredskog materijala, Nabava telekomunikacijskih usluga, Usluge čišćenja ureda), a pregledom Plana nabave za 2016. godine, je vidljivo da do studenog 2016. godine u planu postoji više od 4 (četiri) predmeta bagatelne nabave koji imaju procijenjenu vrijednost nabave veću od 70.000,00 kn. Iz rezultata istraživanja vidljivo je da 13 (trinaest) županija: Bjelovarsko-bilogorska, Dubrovačko-neretvanska, Istarska, Koprivničko-križevačka, Krapinsko-zagorska, Ličko-senjska, Međimurska, Požeško-slavonska, Primorsko-goranska, Sisačko-moslavačka, Šibensko-kninska, Virovitičko-podravska i Vukovarsko-srijemska županija na svojim mrežnim stranicama nemaju postavljene Pozive za dostavu ponuda u postupcima bagatelne nabave.

Iz rezultata istraživanja vidljiv je i iznos bagatelne nabave u vrijednosti od 54.315.594,99 kn koji će biti potrošen na netransparentan način, jer Pozivi za dostavom ponuda čija ukupno procijenjena vrijednost nabave iznosi 54.315.594,99 kn, neće biti objavljeni na mrežnim stranicama županija. Ponude po navedenim Pozivima neće moći dostaviti bilo koji od zainteresiranih gospodarskih subjekata već samo odabrani gospodarski subjekti.

Uspoređujući rezultate ovog istraživanja s rezultatima sličnih istraživanja domaćih autora možemo zaključiti kako stupanj transparentnosti ovisi o vrsti dokumenata koji se objavljuju (Dokumenti za proračunsku transparentnost lokalnih jedinica analizirani u istraživanju Katarina Ott i sur., sa Instituta za javne financije, u kojem su Županije bile vrlo transparentne) i njihovu utjecaju na kasniji reizbor (Povezanost koruptivnih praksi javnih nabava u Hrvatskoj sa vjerojatnošću reizbora lokalnih političara, istraživanje Vuković, V. u kojem je potvrđena hipoteza da zbog povezanih interesa lokalnih poduzetnika i političkih elita, političari na lokalnoj vlasti u Republici Hrvatskoj mogu do određene razine pobjeđivati na izborima bez smanjenja opsega svog koruptivnog djelovanja, štoviše imaju veće šanse za reizbor ukoliko stvaraju sustav koji potiče korupciju).

Radi objektivnosti znanstvenog rada potrebno je navesti ograničenja provedenog istraživanja i prijedloge za buduća istraživanja, te preporuke za unaprijeđenje regulative u području dostupnosti poziva za dostavu ponuda u području bagatelne nabave.

Kao ograničenje istraživanja može se istaknuti činjenica da se podaci na mrežnim stranicama svakodnevno mijenjaju te da se aktualna situacija može razlikovati u odnosu na razdoblje u kojem je istraživanje provedeno.

U budućim istraživanjima trebalo bi proširiti istraživanje na ostale jedinice lokalne samouprave: gradove i općine. Također, u budućim istraživanjima bi trebalo uključiti i sve ostale naručitelje (javne i sektorske) tako da se dobije ukupan iznos bagatelne nabave u Republici Hrvatskoj koji se potroši netransparentno, odnosno bez javne objave.

Preporuke za transparentnije provođenje bagatelne nabave u hrvatskim županijama, se daju u dva smjera. Jedan smjer preporuka se upućuje zakonodavcu, sa preporukama za izmjenama postojećeg Zakona o javnoj nabavi u dijelu koji regulira izradu internog akta za određivanje procedure provedbe bagatelne nabave, na način da se zakonom propiše da se internim aktom nalaže objava bagatelne nabave iznad 20.000,00 kn procijenjene vrijednosti na mrežnim stranicama naručitelja.

Drugi dio preporuka se daje županijama da samoinicijativno bez zakonskog propisivanja, pozive za dostavom ponuda u bagatelnoj nabavi objavljuju na svojim mrežnim stranicama. Također, preporuka se daje i udruzi Zajednica županija, da podiže svijest svojih članica o značaju transparentnosti u provedbi bagatelne nabave, sa svrhom podizanja povjerenja svih dionika u način trošenja proračunskih sredstava.

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Propisi:

Strategija suzbijanja korupcije za razdoblje od 2015. do 2020. godine NN 26/15

Zakon o javnoj nabavi NN br. 90/11, 83/13, 143/13 i 13/14

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**TRANSPARENCY OF BARGAIN PURCHASE
PROCUREMENT IN COUNTIES OF REPUBLIC OF
CROATIA**

Abstract

The purpose of this study was to analyze the content of the official web sites of Croatian counties, in order to establish the level of transparency in the implementation of bargain purchase. Results show that only three counties out of total of twenty one county have published calls for tenders for all procedures of bargain purchase on their websites. Thirteen counties do not publish calls for tenders on their web sites which makes them non-transparent in regards of the realization bargain purchase. Although the other five counties partially publish the calls for tenders on their websites their transparency in the implementation of bargain purchase is not adequate, as there remains a large amount of funds below the thresholds which they define as the limit for publication on the websites to be spent in non-transparent mode. The research results show that 54.315.594,99 HRK, of bargain purchase procurement will not be published on the websites of counties consequently leading to inability to submit tenders by interested business subjects.

Keywords: transparency, implementation, bargain purchase procurement, web page, county

JEL classification: H72, H83

INFORMACIJE ZA AUTORE

„*Ekonomski misao i praksa*“ je recenzirani akademski časopis za ekonomsku teoriju i praksu koji izdaje Sveučilište u Dubrovniku.

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