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EKONOMSKI VJESNIK ECONVIEWS

Review of contemporary business,
entrepreneurship and economic issues



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Ekonomski fakultet u Osijeku

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Faculty of Economics in Osijek

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Sveučilište Josipa Jurja Strossmayera u Osijeku,
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Trg Ljudevita Gaja 7
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Croatia

www.efos.unios.hr/ekonomski-vjesnik
www.efos.unios.hr/ekonomski-vjesnik/en/

ekonomski.vjesnik@efos.hr

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CONTENTS / SADRŽAJ

Dr. sc. Marcel Meler, professor emeritus..... 7
Uz tridesetu godišnjicu izlaženja časopisa "Ekonomski vjesnik"

ORIGINAL SCIENTIFIC ARTICLES / IZVORNI ZNANSTVENI ČLANCI

1. *Blaž Frešer, Polona Tominc*: 21
Innovativeness and financial resources diversity of Slovenian early-stage entrepreneurs
Inovativnost i raznolikost financiranja kod slovenskih poduzetnika u ranoj fazi poslovanja
2. *Julia Perić, Borna Turalija*: 35
Corporate social responsibility as an important factor of business success in Croatian companies
Društveno odgovorno poslovanje kao važan čimbenik uspješnog poslovanja u hrvatskim poduzećima
3. *Ivana Pavlić, Katija Vojvodić, Barbara Puh*: 47
Segmenting the Baby Boomer generation: An example of Croatian consumers
Segmentiranje Baby Boomer generacije: Primjer hrvatskih potrošača
4. *Marinko Jurčević, Tomislav Bubalo, Bia Mandžuka*: 65
Influence of costs on the optimization of transport routes (case study) - Passenger transportation company from Zagreb
Utjecaj troškova na optimizaciju transportnih ruta (case study) - Tvrtka za prijevoz putnika iz Zagreba
5. *Blaženka Hadrović Zekić, Ivana Dražić Lutilsky, Dina Liović*: 75
(Prior) knowledge of accounting as a comparative advantage when selecting accounting service providers
(Pred)znanje računovodstva kao komparativna prednost pri izboru računovodstvenih servisa

PRELIMINARY COMMUNICATIONS / PRETHODNA PRIOPĆENJA

1. *Lena Tijanić*: 87
Realisation of the Europe 2020 strategy and the structural funds allocation by thematic field of intervention in European regions
Realizacija strategije Europa 2020 i tematska alokacija sredstava iz strukturnih fondova u europskim regijama
2. *Marija Martinović, Petra Barišić*: 99
The impact of individual heterogeneity on building consumer loyalty
Utjecaj individualne heterogenosti na izgradnju lojalnosti potrošača
3. *Erik Ružić, Dragan Benazić, Ružica Bukša Tezzele*: 111
The influence of sales management control, sales management support and satisfaction with manager on salespeople's job satisfaction
Utjecaj kontrole menadžmenta prodaje, podrške menadžmenta prodaje i zadovoljstva menadžerom na zadovoljstvo prodavača poslom

4. <i>Branka Remenarić, Ivan Čevizović, Ivana Kenfelja:</i>	125
Binomial model for measuring expected credit losses from trade receivables in non-financial sector entities <i>Binomni model za mjerenje očekivanih kreditnih gubitaka potraživanja od kupaca u subjektima nefinancijskoga sektora</i>	
5. <i>Ezeni Brzovska, Đurđana Ozretić-Došen, Ivana Simjanovska:</i>	137
The importance of different dimensions in the experiential based model among wine tourists and wine industry experts in the Republic of Macedonia <i>Važnost različitih dimenzija u iskustvenom modelu vinskog turizma među turistima i stručnjacima u vinskoj industriji u Republici Makedoniji</i>	
6. <i>Zoran Ivanović, Siniša Bogdan, Suzana Bareša:</i>	149
Portfolio analysis of foreign tourist demand in Croatia <i>Portfolio analiza inozemne turističke potražnje u Republici Hrvatskoj</i>	
7. <i>Krešimir Starčević, Boris Crnković, Jerko Glavaš:</i>	163
Implementation of the General Data Protection Regulation in companies in the Republic of Croatia <i>Implementacija Opće uredbe o zaštiti podataka u trgovačkim društvima u Republici Hrvatskoj</i>	

REVIEW ARTICLES / PREGLEDNI RADOVI

1. <i>Jelena Žugić, Aleksandar Konatar:</i>	179
Comparative analysis of the value of national brands <i>Usporedna analiza vrijednosti nacionalnih brendova</i>	
2. <i>Branka Remenarić, Ivana Kenfelja, Ivo Mijoč:</i>	193
Creative accounting – Motives, techniques and possibilities of prevention <i>Kreativno računovodstvo – motivi, tehnike i mogućnosti sprječavanja</i>	
3. <i>Katarina Marošević, Dijana Bošnjak:</i>	201
Regional development and glocalisation: Theoretical framework <i>Regionalni razvoj i glocalizacija: Teorijski okvir</i>	

BOOK REVIEWS / PRIKAZI KNJIGA

1. <i>Katija Vojvodić</i>	217
Book review Trade Perspectives in the Context of Safety, Security, Privacy and Loyalty	

dr. sc. Marcel Meler, professor emeritus
Sveučilište Josipa Jurja Strossmayera u Osijeku
Ekonoski fakultet u Osijeku
Trg Ljudevita Gaja 7,
31000 Osijek, Hrvatska
mmeler@efos.hr
Tel: +38531224400

UZ TRIDESETU GODIŠNJICU IZLAŽENJA ČASOPISA „EKONOMSKI VJESNIK“

Prije trideset godina, u jednom, u početku nevezanom razgovoru s pokojnim prof. dr. sc. Slavkom Jurišom, ondašnjim prodekanom Ekonomskog fakulteta u Osijeku, rodila se ideja da Ekonomski fakultet pokrene časopis koji će podići njegov kredibilitet među istovrsnim fakultetima u bivšoj državi. Ideju smo izložili ondašnjem dekanu prof. dr. sc. Borivoju Matiću i predsjedniku Poslovnog odbora prof. dr. sc. Petru Aniću koji su se s njom odmah složili i zadužili nas da izradimo elaborat o pokretanju časopisa. To smo nedugo zatim i učinili i Odlukom Savjeta Fakulteta od 1. travnja 1988. godine pokrenut je časopis „Ekonoski vjesnik“, imenovani su članovi Izdavačkog savjeta kao i članovi Uredništva, te glavni i odgovorni urednik i zamjenik urednika. U Odluci se navodi kako je „Ekonoski vjesnik“ polugodišnji glasnik za ekonomske znanosti kojega izdaje Ekonomski fakultet iz Osijeka te da je programski orijentiran na praćenje, analizu i eksplikaciju suvremene ekonomske misli, teorijsku elaboraciju relevantnih segmenata aktualne ekonomske prakse, te objavljivanje, za ekonomiju, zanimljivih tema iz srodnih znanstvenih područja. Već je tada određeno da radovi objavljeni u časopisu podliježu valjanoj specifičnoj kategorizaciji na znanstvene (izvorni znanstveni radovi, prethodna priopćenja, pregledni članci i izlaganja na znanstvenim skupovima), stručne i ostale priloge. Financiranje časopisa je bilo predviđeno na temelju Pravilnika o sufinanciranju znanstvene i izdavačke djelatnosti ondašnjeg Republičkog SIZ-a znanosti (oko 90% prosječno utvrđenih tiskarskih troškova), potom iz redovnih prihoda Fakulteta, kao i iz dijela sredstava Zavoda za eko-

nomska istraživanja Fakulteta te pretplate fizičkih i pravnih osoba i izravne prodaje putem skriptarnice i knjižara.

Zasebno Odlukom imenovano je i 17 članova Izdavačkog savjeta časopisa i to kako slijedi: dr. Petar Anić (Osijek), dr. Ljubomir Baban, zamjenik predsjednika (Zagreb), dr. Đuro Berber (Osijek), dr. Boško Bešir (Osijek), dr. France Černe (Ljubljana), Frano Dragun (Osijek), mr. Petar Đidara (Osijek), mr. Marijan Jakšić (Belišće), dr. dr. h. c. Tibor Karpati (Osijek), mr. Mirko Knežević, predsjednik (Zagreb), dr. Stjepan Lešković (Osijek), dr. Julije Martinčić (Osijek), dr. Borivoj Matić (Osijek), dr. Matija Panjaković (Osijek), Jozo Petović (Zagreb), dr. Josip Prdić (Osijek) i mr. Petar Proklin (Osijek).¹

Od broja 1/1988 za glavnog i odgovornog urednika časopisa imenovan je dr. Petar Anić, tadašnji predsjednik Poslovnog odbora Fakulteta, a za članove Uredništva imenovano je deset djelatnika Fakulteta i to:

- dr. Dražen Barković (do broja 1/1991),
- mr. Kata Ivić (do broja 2/2012),
- dr. Slavko Juriša, urednik (do broja 1/1991),
- dr. Slavica Singer (do broja 1/1997, a od broja 1-2/1998 do broja 2/2013 urednica, te od broja 1/2014 počasna urednica),
- dr. Boško Kujavić (do broja 1/1991),
- dr. Ivan Mandić (do broja 1991),

1 Napomena: pisanje akademskih titula u ovom članku napisano je izvorno kao u korespondentnim brojevima časopisa.

- dr. Marcel Meler, zamjenik urednika (do broja 1/1990, urednik od broja 2/1990 do 1-2/1996, te član Uredništva od 1-2/1998 do danas),
- dr. Branko Novak (do broja 1/1991),
- dr. Matija Panjaković (do broja 1/1991),
- dr. Željko Turkalj (do broja 1/1997, od broja 1-2/2002 do 1-2/2003 i broj 2/2013).

Članovi Uredništva u narednim razdobljima bili su još i:

- dr. Ivan Boras (od 1/1993 do 1-2/1996),
- dr. Anka Mašek (od 1-2/1998 do broja 2/2013),
- dr. Ivan Ferenčak (od broja 1-2/2002 do danas),
- mr. Jasminka Mihaljević (za brojeve 1/2013 i 2/2013 i izvršna urednica od broja 1/2014 do danas).

Prvi broj časopisa „Ekonomski vjesnik“ objavljen je u rujnu 1988. godine u nakladi od 300 primjeraka i u formatu 170x240 mm koji se do danas nije mijenjao. Svi objavljeni radovi bili su recenzirani s tim da su odmah u početku uvedena interna pravila da opseg objavljenih radova načelno ne treba prelaziti jedan autorski arak (a/a), kao i da ukupni opseg radova po broju ne treba biti veći od 30a/a, kao i da minimalni broj znanstvenih radova po broju ne smije biti manji od 9a/a.

Slika 1. Naslovnica prvog broja časopisa 1/1988.



U uvodniku uz prvi broj časopisa pisalo je:

„Ekonomski fakultet u Osijeku i ranije je osjećao nedostatak periodične publikacije koja bi posredovala

u kvalitetnijem obavljanju njegove temeljne funkcije. Utoliko više, što se već legitimirao kao izdavaču udžbenika i monografija, zamjetnim znanstvenoistraživačkim radom u okviru zasebne jedinice Zavoda za ekonomska istraživanja, uspješnom realizacijom znanstvenih i stručnih projekata, formiranjem suvremene ekonomske biblioteke, znanstvenom suradnjom s odgovarajućim institucijama u zemlji i inozemstvu i ostalim znanstvenima aktivnostima.

U sve složenijim egzistencijalnim odrednicama ekonomija kao globalni element oblikovanja materijalne anatomije strukture društva sve je sudbinskija, kako u teorijskih tako i praktičnoj pojavnosti. Ona to nije samo sui generis, ona je to i u glavama ljudi. U kolikoj će mjeri ekonomija zaista biti efikasnija i priznata, ovisi i od upornosti, intenziteta i praktičnih rezultata kojima (poljuljano) povjerenje pretvara u (argumentirano) uvjerenje. Kontinuirano praćenje, istraživanje i objavljivanje priloga u periodičnoj publikaciji koji takvoj promociji ekonomije kao teorije i prakse doprinose, najmanje je što jedna znanstvenonastavna institucija može učiniti. Stoga je prirodno i opravdano nastojanje Ekonomskog fakulteta u Osijeku, kao izdavača, da uđe u krug onih koji na tom planu u granicama raspoloživog potencijala čine što mogu, a nastoje i više.“

Od broja 2/1991 imenovan je novi Izdavački savjet u sljedećem sastavu: dr. Ljubomir Baban (Osijek), dr. Dražen Barković (Osijek), dr. Aleksandar Bazala (Zagreb), dr. Marčelo Dujanić (Rijeka), dr. Drago Gorupić, predsjednik (Zagreb), dr. dr. h.c. Tibor Karpati (Osijek), dr. Ivan Mandić (Osijek), dr. Helena Pavić (Zagreb) i dr. Miroslav Žugaj, zamjenik predsjednika (Varaždin).

Već u prva dva desetljeća izlaženja, časopis se susreo s činjenicom nedostataka radova za objavljivanje. Naime, zbog te činjenice razmjerno često se događalo da se umjesto dva broja godišnje, nažalost, moralo prići izdavanju jednog dvobroja godišnje, i to u razmjerno dugom razdoblju od 1995. godine pa sve do 2008. godine. Međutim, zanimljivo je, s druge strane, da je u ratnim godinama časopis uspio gotovo redovito izlaziti. Navodimo za primjer uvodnik časopisa za broj 2/1991, a koji sam u ime Uredništva napisao u ožujku 1992. godine, a koji izvrsno oslikava ondašnju situaciju:

„Ovaj broj časopisa 'Ekonomski vjesnik' dospijeva u Vaše ruke po prvi puta za vrijeme dosadašnjeg četverogodišnjeg neprekidnog izlaženja uz kašnjenje od nekoliko mjeseci. Većina autora pisali su priloge za ovaj časopis ponajčešće uz svjetlost pe-

trolejskih lampi u vlažnim i neuglednim podrumima, uz zvuk nemilosrdnih detonacija koje su grad Osijek više od šest mjeseci, pa i u vrijeme zaključivanja ovog broja (u ožujku 1992.), obasipale gotovo jednaki intenzitetom. Uz zvuke sirena za zabunu, sirena kojima su kola hitne pomoći odvozile tijela na stotine mrtvih i ranjenih nama poznatih i dragih sugrađana, uz rasplakana lica naše djece, ljudskih tragedija na svakom koraku, pokušalo se nemoguće – živjeti normalno. Ne bijegom od postojećeg, već naprotiv dubokim i ljudskim otporom prema svemu onom toliko iracionalnom što nas je neumitno povelu u kolo smrti, razaranja i neutješne boli. Časopis koji držite u rukama je zato i dokaz više, da i u ratnim uvjetima, uvjetima podrmskog mraka, ali napose mraka razuma i mraka zabluda koji se nadvio nad naš i ostale ratom teško pogođene gradove, znanstvena istina može i mora ugledati svjetlost dana i da ujedno pokazuje da se voljom, htijenjem i domoljubljem mogu ostvariti ma koji zamišljeni i produhovljeni ciljevi. I ovaj broj časopisa, tako izašao u izuzetno teškim uvjetima, predstavlja, vjerujemo, još jedan od doprinosa ostvarenju ovih ciljeva.“

U trideset godina izlaženja, ukupno je izašlo 47 brojeva časopisa, odnosno prosječno oko 1,5 broj godišnje, budući da su njih 13 bili dvobroji. Dvobroji su najčešće izlazili kao rezultat činjenice, kako je već prethodno spomenuto, da se u pojedinim razdobljima nije dobivalo dovoljno kvalitetnih radova, što je vidljivo iz tablice 1.² Tek od 2009. godine, odnosno XXII. godišta dostignut je ritam redovitoga izlaženja časopisa te je časopis redovito izlazio dva puta godišnje s radovima pristiglim unutar pojedinoga godišta. Časopis je izlazio na hrvatskom jeziku uz sažetak na engleskom jeziku sve do broja 1/2014, kada dijelom mijenja i naslov i od kada se tiska isključivo na engleskom jeziku, uz sažetke na hrvatskom jeziku.

Odmah u početku, časopis „Ekonomski vjesnik“ dobio je univerzalnu decimalnu klasifikaciju UDK 33 i Međunarodni standardni broj serijske publikacije (International Standard Serial Number) ISSN 0353 – 359X kojem je od broja 1/1992. dodijeljena i CODEN oznaka tako da od tada on u cijelosti glasi: ISSN 0353 – 359X: CODEN EKJVJE, dok je od broja 1-2/2008 uveden i elektronički ISSN broj (e-ISSN

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- mr. sc. Branka Marijanac (od broja 1/1990 do broja 1/1991)
- Rade Kovačević, prof. (od broja 2/1991 do broja 2/2009) i
- Ljerka Radoš, prof. (od broja 1/2010 do danas).

Lektori za hrvatski jezik u dosadašnjem tridesetogodišnjem razdoblju bili su:

- dr. sc. Zlatko Kramarić (od broja 1/1988. do broja 2/1994)
- dr. sc. Ivan Jurčević (od broja 1/1995 do broja 1-2/1998 i od broja 1-2/2000 do broja 2/2012)
- dr. sc. Branimir Belaj, prof. (broj 1-2/1999) i
- dr. sc. Emina Berbić Kolar (od broja 1/2013 do danas).

Korektor je bila:

- Ana Muhar (od broja 1/1988. do broja 2/1992).

Tehnički urednik je bio:

- Pavle Osekovac (od broja 1/1988. do broja 2/1992).

Uvođenje računalske obrade teksta uslijedilo je od 1993. godine, a njezini izvršitelji su bili:

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- Grafika Osijek (od broja 1-2/2002 do broja 1-2/2007).

Od broja 1-2/2008 se više ne govori o računalnoj obradi, već o dizajnu, odnosno grafičkom oblikovanju, kako slijedi:

- Dizajn MIT d.o.o., dizajn studio (od broja 1-2/2008 do broja 1/2016)
- Grafika Osijek (od broja 2/2016 do danas).

2 Godišta časopisa navedena u tablicama 1. i 2. uzeta su u analizi u obzir budući da bi međusobno uspoređivanje objavljenih brojeva časopisa bilo otežano jer je od ukupno 47 brojeva časopisa njih 13 bilo objavljeno kao dvobroji.

Tisak časopisa bio je povjeren sljedećim tiskarama:

- GRO „Litokarton“ (od broja 1/1988 do broja 2/1989)
- GP „Štampa“ (od 1/1990 do 1/1992)
- Gradska tiskara Osijek (broj 2/1992, te od broja 2/1994 do broja 1-2/2001)
- TEXpert p. o. Đakovo (2/1993)
- rota b&i, Đakovo (1/1994)
- Grafika, Osijek (od broja 1-2/2002 do broja 1-2/2007)
- IBL, d.o.o. Osijek/Tenja (od broja 1-2/2008 do broja 1/2016)
- Grafika, Osijek (od broja 2/2016 do danas).

Glavni i odgovorni urednici časopisa su u pravilu bili dekani Fakulteta što je regulirano i Pravilnikom o izdavačkoj djelatnosti Fakulteta (osim u začetku od broja 1/1988 do broja 2/1989, kada je to bio predsjednik ondašnjeg poslovnog odbora) i to kako slijedi:

- dr. sc. Petar Anić, predsjednik poslovnog odbora (od broja 1/1988 do broja 2/1989)
- dr. sc. Slavko Juriša (za brojeve 2/1990 i 1/1991)
- dr. sc. Dražen Barković (od broja 2/1991 do broja 2/1992)
- dr. sc. Ivan Boras (od broja 1/1993 do broja 1-2/1996)
- dr. sc. Marcel Meler (za broj 1-2/1997)
- dr. sc. Željko Turkalj (od broja 1-2/1998 do broja 1-2/2001 i od broja 1-2/2004 do broja 1/2013)
- dr. sc. Ivan Ferenčak (od broja 1-2/2002 do broja 1-2/2003)
- dr. sc. Vladimir Cini (od broja 2/2013 do broja 1/2017)
- dr. sc. Boris Crnković (od broja 2/2017 do danas).

Izdavački savjet časopisa je od broja 1-2/2004, djelovao u bitno promijenjenom sastavu, budući da su njemu sudjelovali i članovi iz inozemstva i to kako slijedi:

1. dr. sc. Urban Bacher, Pforzheim, Njemačka
2. dr. sc. Dražen Barković, Osijek, predsjednik
3. dr. sc. Đuro Beničić, Dubrovnik
4. dr. sc. Petar Dobay, Pécs, Mađarska
5. dr. sc. Petar Filipić, Split
6. dr. sc. Nino Grau, Giessen-Friedberg, Njemačka
7. dr. sc. Rainer Gildeggen, Pforzheim, Njemačka

8. dr. sc. Anton Hauc, Maribor, Slovenija
9. dr. sc. Rupert Huth, Pforzheim, Njemačka
10. dr. sc. Dane Kordić, Mostar, Bosna i Hercegovina (do broja 1-2/2007)
11. dr. sc. Ivan Mandić, Osijek
12. dr. sc. Ivan Mencer, Rijeka
13. dr. sc. Ivan Lovrinović, Zagreb
14. dr. sc. Ralph Schieschke, Pforzheim, Njemačka
15. dr. sc. Miroslav Žugaj, Varaždin.

Od broja 1-2/2008 u Izdavački savjet časopisa imenovan je dr. sc. Soumitra Sharma, Pula. U ovom sastavu Izdavački savjet je djelovao sve do broja 2/2013 kada više nije bio neophodan sukladno u međuvremenu izvršenim Izmjenama i dopunama Pravilnika o izdavačkoj djelatnosti 2014. godine.

Opseg radova koji su bili prijavljivani za objavljivanje u časopisu trebao se u početku kretati uglavnom od jednoga do dva autorska arka, da bi se naknadno ustanovilo da radovi trebaju biti unutar opsega od 5.000 do 7.500 riječi (od broja 1/2013), potom od 5.000 do 8.000 riječi (od broja 1/2014), te naposljetku od 4.500 do 6.500 riječi (od broja 1/2014 do danas).

Naklada časopisa kretala se različito u dosadašnjem tridesetogodišnjem razdoblju i to 200, 300 ili 400 primjeraka, uglavnom ovisno o broju neprodanih primjeraka prethodnoga broja. Treba znati da je u predratnim godinama pretplata, osobito pravnih osoba bila prisutna u priličnoj mjeri, a djelomično je bila prisutna i prodaja putem skriptarnice Fakulteta i nekolicine knjižara. Danas to više, razumljivo, nije tako pa naklada od 2014. godine iznosi 150 primjeraka. Naime, činjenica je da se svi izdani brojevi časopisa već od 2008. godine u cijelosti (u otvorenom pristupu) nalaze na *web*-stranici Fakulteta, a od broja 1/2010 i na portalu znanstvenih časopisa Hrčak. Tiskani primjerci se danas najvećim dijelom distribuiraju kroz institut razmjene s knjižnicama (45 primjeraka u zemlji i 35 u inozemstvu), dok se sedamdesetak primjeraka po pojedinom broju dostavlja autorima kao autorski primjerci. Godišnja pretplata danas iznosi 200 kuna, odnosno 30 eura, međutim prema prethodno navedenom, pretplata na časopis, razumljivo, ne nailazi na zanimanje potencijalnih čitatelja.

Od broja 1-2/2008 naslovnica časopisa je nakon dvadeset godina izlaženja redizajnirana (Slika 2.) kao, što su, uostalom, i redizajnirane i unutarnje stranice časopisa.

Slika 2. Redizajnirana naslovnica časopisa od broja 1-2/2008



Od prvoga broja časopisa, dakle od broja 1/1988, u impresumu je bilo naznačeno da izdavanje časopisa sufinancira ondašnji SIZ znanosti SR Hrvatske. Trajalo je to do broja 2/1990, da bi počevši od broja 1/1992, bilo naznačeno da izdavanje časopisa sufinancira Ministarstvo znanosti, tehnologije i informatike Republike Hrvatske, od broja 2/1992 Ministarstvo znanosti Republike Hrvatske, a od broja 1/1993 do broja 1/1995 Ministarstvo znanosti i tehnologije Republike Hrvatske. Treba istaknuti kako je riječ bila uglavnom o minornim financijskim sredstvima, tako da je glavninu financijskih sredstava potrebnih za izdavanje časopisa pokrivalo Ekonomski fakultet u Osijeku, što je, također, bio jedan od razloga za neredovito izlaženje časopisa sve negdje do 2008. godine. Primjedba potencijalnih financijera je nerijetko bila činjenica da je časopis bio svrstavan u tzv. „kućne časopise“ što znači da su autori radova, ali i recenzenti, dobrim dijelom bili s Ekonomskog fakulteta u Osijeku, što se u međuvremenu bitno promijenilo, a to se može zaključiti i iz Tablice 2., u stupcu u kojem je izračunat udio znanstvenih radova autora s Ekonomskoga fakulteta u Osijeku u ukupnom broju znanstvenih radova pojedinih godišta časopisa. Udio autora s Ekonomskoga fakulteta u Osijeku bitno je smanjen, s nekadašnjih čak i više od osamdesetak posto, na nekih dvadesetak posto u posljednjih pet godišta izlaženja časopisa, što govori o zanimanju autora iz zemlje i inozemstva za objavljivanje u časopisu, ponajprije, vjerojatno, zahvaljujući podizanju njegove kvalitete i referiranosti u poznatim bazama podataka.

Od broja 1/2016 do danas ponovo je u impresumu časopisa naznačeno da izdavanje časopisa financijski podupire Ministarstvo znanosti, obrazovanja i sporta Republike Hrvatske. Razlog tomu je činjenica da je putem zahtjeva za financijsku potporu znanstvenom časopisu i časopisu za popularizaciju znanosti Ministarstvo znanosti, obrazovanja i sporta Republike Hrvatske, sukladno svojim kriterijima za područje društvenih znanosti, odobrilo sufinanciranje časopisa kako slijedi:

- 2015. godine - 54.747 kuna
- 2016. godine - 67.411 kuna
- 2017. godine - 72.240 kuna

U te tri godine, ponajprije zahvaljujući razmjerno dobrom ispunjavanju postavljenih kriterija za financiranje od strane Ministarstva, dakle i očiglednim podizanjem kvalitete časopisa, dobivena su izdašnja financijska sredstva kojima je omogućeno redovito izlaženje časopisa. Međutim, odobreno sufinanciranje časopisa ipak nije dostatno pa Ekonomski fakultet u Osijeku, kao izdavač, vlastitim sredstvima još uvijek redovito pokriva ostatak do punog iznosa troškova izdavanja časopisa. Naime, prihodi od pretplate i prodaje časopisa (putem skriptarnice Fakulteta) su neznatni u ukupnoj strukturi ostvarenih prihoda, o čemu je prethodno već bilo govora.

U Tablici 1. prikazana je struktura objavljenih radova u časopisu za svih 30 godišta izlaženja, a prema njihovoj ustanovljenoj kategorizaciji, koja je uobičajena za časopise te vrste (izvorni znanstveni članci, prethodna priopćenja, pregledni radovi, stručni radovi, prikazi i ostali radovi). Treba napomenuti da su u dva broja časopisa u godištim 1998 i 1999. ukupno objavljena i tri rada koja su kategorizirana kao izlaganja na znanstvenim skupovima, međutim oni nisu uzeti u obzir prilikom izrade ove tablice, budući da je praksa objavljivanja takvih radova prekinuta jer se za takvu vrstu radova očekuje da budu objavljeni u zborniku radova pripadajućih znanstvenih skupova. Međutim, godine 2015. i 2016. objavljena su i dva posebna izdanja časopisa u kojima su bili objavljeni odabrani radovi s dva međunarodna skupa održana na Ekonomskom fakultetu u Osijeku. Riječ je o, ponajprije, 13th Congress of the International Association on Public and Nonprofit Marketing (IAFN) koji je održan od 12. do 14. lipnja 2014. godine, a u posebnom izdanju časopisa bilo je objavljeno ukupno deset znanstvenih radova te o 16th International Scientific Conference Business Logistics in Modern Management (BLMM) koja je održana 13. listopada 2016. godine, a u posebnom izdanju časopisa bilo je objavljeno ukupno osam znanstvenih radova.

Na temelju Tablice 1. moguće je zaključiti kako u časopisu, gledajući svih trideset godina izlaženja, značajno prevladavaju znanstveni radovi (73,4%), u odnosu na radove koji ne pripadaju kategoriji znanstvenih radova (stručni radovi, prikazi i ostali radovi – 26,6%), što je i očekivano obzirom na profilaciju samoga časopisa. U kategoriji znanstvenih radova najveći udio imaju pregledni radovi (39,3%), a potom slijede prethodna priopćenja (32,0%) i izvorni znanstveni članci (28,7%) što govori o prilično ujednačenoj zastupljenosti ovih triju kategorija znanstvenih radova. U kategoriji radova koji ne pripadaju kategoriji znanstvenih radova, očekivano je najveći udio (63,6%) prikaza, a bitno je manji udio stručnih (30,9%), te ostalih radova (5,5%). Ono što se zasigurno može držati nedostatnim je iznimno slab udio znanstvenih članaka inozemnih autora u odnosu na ukupan broj radova i po pojedinim kategorijama znanstvenih radova. Tako on za izvorne znanstvene članke iznosi 9,2%, za prethodna priopćenja 10,8% te pregledne radove 10,1%, dakle otprilike 10% prosječno, što objektivno gledajući nije nimalo zadovoljavajuće. Međutim, kada se u razmatranje uzmu samo posljednja četiri godišta, dakle od broja 1/2014 otkako se radovi u časopisu objavljuju isključivo na engleskom jeziku, do danas, situacija je ipak znakovito drugačija. Naime, udio znanstvenih članaka inozemnih autora, u odnosu na ukupan broj radova po pojedinim kategorijama znanstvenih radova u tom je slučaju sljedeći: za izvorne znanstvene članke iznosi 40,7%, za prethodna priopćenja 22,0%, te pregledne radove 30,0%, dakle otprilike 31% prosječno, što je značajno bolje i za nadati se da će se situacija u budućnosti i dalje kontinuirano poboljšavati. Za radove koji ne pripadaju kategoriji znanstvenih radova situacija je, razumljivo, bitno nepovoljnija budući da udio inozemnih radova, u odnosu na ukupan broj radova iznosi 7,4% za stručne radove, samo 0,7% za prikaze i 8,3% za ostale radove.

U Tablici 1. su u svakoj od kategorija radova, kako znanstvenih tako i onih koji to nisu, posebno izdvojeni radovi autora iz akademske zajednice (visoka učilišta, znanstveni instituti i sl.), od autora izvan akademske zajednice, te su se na temelju dobivenih podataka mogli izračunati i odgovarajući udjeli. Na taj način je moguće ustanoviti da je udio autora izvan akademske zajednice prilično zadovoljavajući budući da on kod preglednih radova domaćih au-

tora iznosi razmjerno visokih 22,4%, kao uostalom i kod prethodnih priopćenja domaćih autora gdje iznosi 20,8%. Kod izvornih znanstvenih članaka je taj udio značajno niži i iznosi 8,2%. To govori u prilog važnoj činjenici da se domaći autori s akademskim titulama, ali koji nisu članovi akademske zajednice, ipak u zadovoljavajuće velikoj mjeri bave znanstvenim radom, što se od njih treba i mora očekivati. Jednako tako, očekivan je i najveći udio (31,7%) domaćih autora izvan akademske zajednice u ukupnom broju stručnih radova jer je među njima i najveći broj autora koji nemaju najviše akademske titule.

U Tablici 2. je prikazan ukupan broj radova po pojedinim godištim časopisa unutar njihovog tridesetogodišnjeg razdoblja izlaženja, gdje se može ustanoviti kako je ukupno objavljeno 606 znanstvenih radova u sve tri kategorije, te 220 radova koji ne pripadaju kategoriji znanstvenih radova (stručni radovi, prikazi i ostali radovi), odnosno ukupno 826 radova. To znači da je u svakom godištu izlaženja časopisa objavljeno prosječno 20,20 znanstvenih radova, zatim prosječno 7,33 radova koji ne pripadaju kategoriji znanstvenih radova (stručni radovi, prikazi i ostali radovi), odnosno ukupno 27,53 radova po pojedinom godištu izlaženja časopisa. Budući da je u promatranom tridesetogodišnjem razdoblju ukupno izdano 47 brojeva časopisa, odnosno prosječno 1,57 broj godišnje, lako je moguće izračunati kako je i prosječan broj znanstvenih radova bio 12,87 po pojedinom broju, zatim prosječno 4,67 rada koji ne pripadaju kategoriji znanstvenih radova (stručni radovi, prikazi i ostali radovi) po broju, što ukupno iznosi prosječno 17,54 radova po pojedinom broju časopisa. U Tablici 2. je, također, vidljivo, da je za svih trideset godina izlaženja časopisa ukupan broj stranica časopisa iznosio 8.899, odnosno prosječno 296,63 stranica po godištu ili prosječno 189,34 stranica po broju.

Tablica 2. Struktura svih objavljenih radova u tridesetogodišnjem razdoblju u časopisu „Ekonoski vjesnik“ prema njihovoj vrsti te ostalim karakteristikama

Godina i volumen	Ukupno znanstveni radovi	Ukupno stručni radovi, prikazi i ostali radovi	Ukupno svi radovi	Brojeva godišnje	Broj stranica pojedinog godišta	Broj znanstvenih radova s EFOS-a	Udio znanstvenih radova s EFOS-a
1988. I.	23	11	34	2	268	10	43,5%
1989. II.	27	15	42	2	352	15	55,6%
1990. III.	22	12	34	2	296	11	50,0%
1991. IV.	28	15	43	2	328	20	71,4%
1992. V.	29	17	46	2	348	23	79,9%
1993. VI.	25	10	35	2	344	19	76,0%
1994. VII.	19	13	32	2	260	16	84,2%
1995. VIII.	18	6	24	2	226	11	61,1%
1996. IX.	13	2	15	1	128	10	76,9%
1997. X.	10	5	15	1	124	4	40,0%
1998. XI.	9	9	18	1	148	8	88,9%
1999. XII.	14	4	18	1	149	9	64,3%
2000. XIII.	9	7	16	1	144	6	66,7%
2001. XIV.	7	7	14	1	130	6	85,7%
2002. XV.	8	4	12	1	122	7	87,5%
2003. XVI.	10	5	15	1	164	4	40,0%
2004. XVII.	11	4	15	1	168	3	36,4%
2005. VIII.	12	3	15	1	166	7	58,3%
2006. XIX.	10	2	12	1	126	6	60,0%
2007. XX.	10	1	11	1	120	5	50,0%
2008. XXI.	7	7	14	1	124	3	42,9%
2009. XXII.	26	10	36	2	406	13	50,0%
2010. XIII.	31	7	38	2	532	11	35,5%
2011. XXIV.	27	7	34	2	444	7	25,9%
2012. XXV.	26	6	32	2	408	10	38,5%
2013. XVI.	49	6	55	2	720	10	20,4%
2014. XVII.	29	5	34	2	484	3	10,3%
2015. XXVIII.	34	7	41	2	612	6	17,6%
2016. XXIX.	32	6	38	2	544	9	28,1%
2017. XXX.	31	7	38	2	514	5	16,1%
Ukupno	606	220	826	47	8.899	277	45,7%
Prosjek po godištu	20,20	7,33	27,53	1,57	296,63	9,23	-
Prosjek po broju	12,87	4,67	17,54	-	189,34	5,89	-

Tablica 3. u nastavku uređena je sukladno Pravilniku o znanstvenim i umjetničkim područjima, poljima i granama (NN 118/2009), s tim da je izvršena tek djelomična modifikacija (grupiranje) pojedinih grana unutar polja 5.01. Ekonomija. U tablici su svi objavljeni znanstveni radovi u tridesetogodišnjem razdoblju razvrstani po pojedinim znanstvenim granama i moguće je jednostavno zaključiti kako je

najveći broj objavljenih radova iz grane financija i računovodstva, potom iz mikroekonomije, menadžmenta i organizacije, a najmanje objavljenih radova je iz grane poduzetništva što je dijelom i razumljivo, budući da su se radovi iz poduzetništva u časopisu počeli javljati tek od 1999. godine.

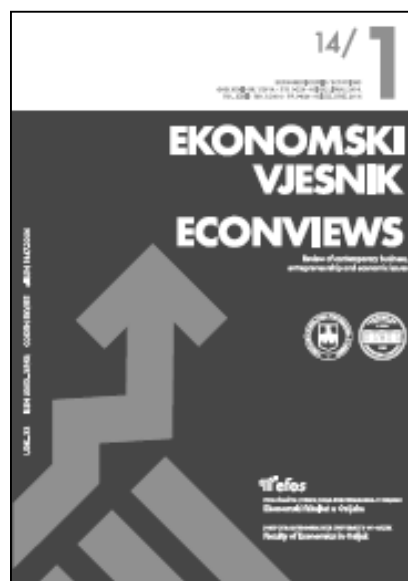
Tablica 3. Struktura objavljenih znanstvenih radova u časopisu „Ekonoski vjesnik“ sukladno pojedinim znanstvenim granama u tridesetogodišnjem razdoblju

Godište	financije i računovodstvo	informatika	kvantitativna ekonomija	makroekonomija	marketing	međunarodna ekonomija	mikroekonomija, organizacija i menadžment	opća ekonomija	poduzetništvo	trgovina i turizam	ostalo	Ukupno znanstvenih radova
1988. I.	1	2	5		2	1	5	7				23
1989. II.	3	1	3	5	4		5	3			3	27
1990. III.	3		1	5			6	3			4	22
1991. IV.	2	1	2	2	4	2	5	4		2	4	28
1992. V.	4	2		4	3	4	3	1		3	5	29
1993. VI.	4		2	1	4	1	3	1			9	25
1994. VII.	3		1		3	4	2	3		1	2	19
1995. VIII.	5		1	2	1	1	2	1		3	2	18
1996. IX.	3		1		2	2	2			1	2	13
1997. X.	2		3			2	2				1	10
1998. XI.	3		3			1		1		1		9
1999. XII.	4		1	1		4	1		1	1	1	14
2000. XIII.	1		1	1	2	1	3					9
2001. XIV.	2				1	1	1	1			1	7
2002. XV.	2				2	1	2				1	8
2003. XVI.	1				4	2	1		1	1		10
2004. XVII.	1		1		2	1	1			2	3	11
2005. XVIII.	3	1		2	1		1			1	3	12
2006. XIX.	3	2	1	1		1					2	10
2007. XX.	2	1		1		1	2	1			2	10
2008. XXI.	2	2		1		1	1					7
2009. XXII.	9	4	1	1	1	4	2		1	2	1	26
2010. XXIII.	9	1	1	1	3	1	9				6	31
2011. XXIV.	7			3	2	3	6	1		1	4	27


Godište	financije i računovodstvo	informatika	kvantitativna ekonomija	makroekonomija	marketing	međunarodna ekonomija	mikroekonomija, organizacija i menadžment	opća ekonomija	poduzetništvo	trgovina i turizam	ostalo	Ukupno znanstvenih radova
2012. XXV.	6	2	1	2	3	4	5			2	1	26
2013. XXVI.	11	5	3	3	4	4	7		2	6	4	49
2014. XXVII.	4	1		2	1	1	7	1	2	5	5	29
2015. XXVIII.	13				3	3	5		2	2	6	34
2016. XXIX.	8	1		1	5	3	8		1	3	2	32
2017. XXX.	6	1	1		4	2	7		1	4	5	31
Ukupno	127	27	33	39	61	56	104	28	11	41	79	606
Rang	1	10	8	7	4	5	2	9	11	6	3	-
Struktura (u%)	20,9	4,4	5,5	6,4	10,1	9,2	17,2	4,6	1,8	6,9	13,0	100

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Slika 3. Djelomično redizajnirana naslovnica časopisa od broja 1/2014



Od broja 1/2014 izvršena je izuzetno velika promjena u časopisu budući da se započelo s objavljivanjem svih radova isključivo na engleskom jeziku (Slika 3.). Tom je prilikom proširen i naslov časopisa koji od tada glasi EKONOMSKI VJESNIK/ECONVIEWS uz dodani podnaslov Review of contem-

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Od spomenutog broja 1/2014 izvršene su i bitne promjene u izvršiteljima te je umjesto glavnog i odgovornog urednika imenovan glavni urednik; dekan Vladimir Cini, kao i zamjenica glavnog urednika Sanja Pfeifer.

Uvedeno je još i sljedeće:

- Počasna urednica – Slavica Singer
- Izvršna urednica – Jasminka Mihaljević
- Urednik novak – Dario Šebalj
- Lektorica i prevoditeljica za engleski jezik – Ljerka Radoš
- Lektorica za hrvatski jezik – Emina Berbić Kolar

Od broja 1/2015 prethodnom je pridodan i tehnički urednik Oto Wilhelm.

Broj članova Uredništva varirao je u proteklom tri-desetogodišnjem razdoblju od pet, šest, deset pa do današnjih 28 članova budući da je ono također od broja 1/2014 bitno prošireno osobito s članovima iz inozemstva, kako slijedi u nastavku:

Dražen Barković, Đula Borozan, Ivan Ferenčak, Jasna Horvat, Mirna Leko Šimić, Marcel Meler, Josip Mesarić, Sunčica Oberman Peterka, Željko Požega, Domagoj Sajter, Nataša Šarlija, Antun Šundalić i Marijana Zekić Sušac, svi s Ekonomskog fakulteta u Osijeku;

- Maja Biljan-August, Ekonomski fakultet Rijeka;
- Suzana Marković, Fakultet za menadžement u turizmu i ugostiteljstvu, Opatija;
- Thomas Cleff i Regina Moczadlo, Hochschule Pforzheim, Fakultät für Wirtschaft und Recht, Pforzheim, Njemačka;

- Erzsebet Hetesi, Szegedi Tudományegyetem, Gazdaságtudományi kar, Szeged, Mađarska
- Antal Szabo, ERENET, Budimpešta, Mađarska;
- Helena Maria Baptista Alves, University of Beira Interior, Department of Management and Economics, Covilhã, Portugal;
- Marius Gavrilitea, Universitatea Babeş / Bolyai, Facultatea de Business, Cluj-Napoca, Rumunjska;
- Zsuzsanna Katalin Szabo, Facultatea de Ştiinţe Economice, Juridice şi Administrative, Targu-Mureş Rumunjska;
- Erich Schwarz, Fakultät für Wirtschaftswissenschaften, Klagenfurt, Austrija;
- Antti Paasio, Turun yliopiston, Turun kauppa-korkeakoulu, Turku, Finska;
- Irena Ograjenšek, Ekonomska fakulteta, Ljubljana, Slovenija;
- Miroslav Rebernik, Ekonomsko-poslovna fakulteta, Maribor, Slovenija;
- Igor Jakomin, Fakulteta za pomorstvo in promet, Ljubljana, Slovenija;
- Allan Gibb, Durham University, Velika Britanija;
- Jerome Katz, Saint Louis University, SAD.

Od broja 2/2013 časopisa primljene radove je recenziralo po dva priznata recenzenta (u vidu dvostruko slijepa recenzije) iz zemlje i inozemstva. Treba istaknuti da je za sve vrijeme izlaženja značajan problem bilo i iznalaženje kvalitetnih recenzenata osobito u posljednje vrijeme, kada je od broja 1/2014 časopis počeo izlaziti isključivo na engleskom jeziku. Od tog vremena podizanje kvalitete časopisa pretpostavlja dobivanje kvalitetnih radova autora osobito iz inozemstva, te angažman kvalitetnih recenzenata, također osobito iz inozemstva, a za to je preduvjet što veća vidljivost radova kao posljedica uključivanja časopisa u što više baza podataka. Ako se obje ove pretpostavke ostvare, onda će časopis imati svoju budućnost, bit će referiran i u najkvalitetnijim bazama podataka i na taj način ostvariti i svoju misiju i cilj postojanja. Uredništvo časopisa, osobito u posljednje vrijeme, čini velike napore da se to i ostvari pa je za očekivati da će časopis „Ekonoski vjesnik“ u skoroj budućnosti zauzeti još značajnije mjesto među istovrsnim časopisima u Republici Hrvatskoj, a i u širem okruženju.

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Passenger transportation company from Zagreb*

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Blaž Frešer

*University of Maribor
Faculty of Economics and Business
Razlagova 14,
2000 Maribor, Slovenia
blaz.freser1@um.si
Phone: +38622290313*

Polona Tominc

*University of Maribor
Faculty of Economics and Business
Razlagova 14,
2000 Maribor, Slovenia
polona.tominc@um.si
Phone: +38622290302*

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INNOVATIVENESS AND FINANCIAL RESOURCES DIVERSITY OF SLOVENIAN EARLY-STAGE ENTREPRENEURS

ABSTRACT

This paper focuses on the diversity of financial resources for Slovenian early-stage entrepreneurs. In the empirical study, we examined whether early-stage entrepreneurs with different characteristics regarding innovativeness also differ regarding the mode of obtaining financial resources, where the average number of used financial resource types and the average share of owned financial resources provided were analysed. Demographic characteristics (age and gender) of early-stage entrepreneurs were also taken into account. As results suggest, there are differences in the diversity of financial resources used between groups of early-stage entrepreneurs in relation to various aspects of their innovativeness. However, a statistically significant difference occurred only when analysing innovativeness in terms of technology. Results also indicate that there are statistically significant differences between groups of entrepreneurs according to their age, in both the number of financial resources used and the share of own financial resources provided. On the other hand, results don't indicate any statistically significant gender differences, either in the number of financial resources used or in the share of own financial resources provided.

This paper is based on Global Entrepreneurship Monitor (GEM) data for Slovenia; the large number of countries participating in the world-wide GEM research enables the international comparability of the topic analysed. As such, this research provides important insights into early-stage entrepreneurs' behaviour in a country context.

Keywords: Financing, own financial resources, innovativeness, demographic factors, early-stage entrepreneurs

1. Introduction

The core contribution of this paper relates to the analysis of diversity of financial resources used by Slovenian early-stage entrepreneurs. This paper is based on data from the GEM Slovenia 2015 database. The possibility of comparisons with findings referring to other countries and regions participating in GEM is a major advantage of this world-wide research project. Namely, in 2015 GEM included 60

participating countries. The importance of multi-country studies of entrepreneurial activity in enabling the comparison and replication of research and generating meaningful contributions to scholarship, practice, and policy is outlined (Terjesen et al., 2016). This is especially important when processes in Slovenia are analysed in comparison with the broader regional European and global environment.

GEM defines early-stage entrepreneurs in the Total Early-Stage Entrepreneurial Activity (TEA), which include nascent and new entrepreneurial activities. TEA indicates the prevalence of individuals engaged in nascent entrepreneurship and in the new enterprise ownership for the adult population (18 to 64 years of age). Nascent entrepreneurs are those who have taken steps to start a new business (to own and manage it at the same time), but have not yet paid salaries or wages for more than three months. New entrepreneurs are running a new business as (co) owners and managers that have been in operation for between 3 and 42 months (i.e. 3.5 years) (Daniels et al., 2016: 21).

This paper provides an answer to the question: If groups of early-stage entrepreneurs that differ according to the innovativeness, age and gender differ also regarding the mode of obtaining financial resources, where were the number of used financial resources types and the average share of own financial resources provided analysed?

There is no doubt about the importance of small- and medium-sized businesses for national economies. In their study, Davidsson and Delmar (2002) have shown the great impact of small and medium businesses (attention was focused mainly on nascent and new entrepreneurs in the early years of operation) on national employment and economic growth. Since the financial resources and their availability have an important influence on enterprises' operations, and thus also on the overall entrepreneurial activity and economy in general, we believe this topic deserves special attention.

Access to financial resources is one of the key elements that have an impact on the development and growth of small and medium-sized enterprises¹ many of which belong to the early-stage entrepreneurs. The lack of financial resources or inadequate financial resources may lead to inability of proper functioning of these enterprises or to the inability of proper realization of opportunities. This could negatively influence the growth process of these enterprises (Carter, Van Auken, 2005; Eddleston et al., 2014; Wu et al., 2007; Bewaji et al., 2015; Shane, Cable, 2002). This implies that the acquisition of financial and other resources is one of the key challenges of modern entrepreneurial process (Grichnik et al., 2014).

Innovation and entrepreneurship are closely connected concepts. It is argued that entrepreneurs disrupt market equilibrium by introducing new product-market combinations into a market, teach-

ing customers to want new things, and driving out less productive firms as their innovations advance the production frontier. Innovation capabilities are thus important to an economy's ability to become competitive, particularly in higher-productivity sectors (Daniels et al., 2016: 39). Innovations could differ between each other, because they could be disruptive (new ideas that change the status quo) or more or less focused on small changes in the existing situation (Dyer et al., 2011). Innovativeness represents the most frequently used measure of the degree of newness of an innovation (Garcia, Calantone, 2002: 112).

GEM Entrepreneurial Finance Report (Daniels et al., 2016: 26) data indicate that entrepreneurs in innovation-driven economies, as compared to efficiency- and factor-driven economies, on average use higher amounts of formal resources (especially resources from banks, venture capital, and government and crowdfunding). With this research we aim to find out if different aspects of innovativeness are related to the financial resource diversity and if innovativeness creates differences between early-stage entrepreneurs in an innovation-driven economy (in the case of Slovenia).

We believe that the important contribution of this paper is also represented by the following points. Firstly, despite the huge significance of this topic, there is a limited amount of knowledge and previous research. Secondly, the existing research studies are mostly focused on the association between a single factor (innovativeness, demographic factors) and a single financial resource. Therefore, we see in our research an advantage in combining more than one financial resource, which allows us to see the wider picture of entrepreneurs' decisions within the Slovenian entrepreneurial ecosystem in comparison with the international context of GEM.

2. Literature review and hypotheses

Past entrepreneurship research studies have highlighted several characteristics that affect entrepreneurial behaviour and performance. Among them, researches often emphasise the importance of innovation (Teece, 2007) and the influence of demographic and personal characteristics (Shane, 2003; Krueger Jr. et al., 2000).

Innovativeness is most frequently used as a measure of the degree of newness of an innovation. Although the majority of research takes a firm's perspective toward newness, it can be also viewed differently, such as newness to the world, to the adopting unit,

to the industry, to the market, and/or to the consumer (Garcia, Calantone, 2002: 112).

For the purposes of this research, we will focus on the definition of innovativeness that is used in GEM, which is in line with the above presented aspects. Therefore, innovativeness is analysed from three different points of view, which are the technological point of view, newness from consumers' point of view, and the competitors' point of view (Rebernik et al., 2016: 43). Entrepreneurs are innovative in the technological point of view if they use technologies that are available on the market for less than a year, from the aspect of newness to consumers if their enterprises offer products/services that are new to all consumers, and from the competition's point of view if entrepreneurs operate on markets with no competitive businesses (ibid, 2016: 43).

Common to all three aspects of innovativeness is novelty, either in terms of the technology used or for the consumers and competitors. This is in line with the findings of Garcia and Calantone (2002: 112-113) who have pointed out that despite the fact that there are many different aspects of innovativeness, these aspects have a common point, which is related to market or to technological factors.

Past research has shown that innovative small- and medium-sized enterprises have, on average, higher demand for external capital, and that this demand seems to have increased since the financial crisis (Lee et al., 2015: 379). According to GEM Entrepreneurial Finance Report, innovative entrepreneurs need about 1.5 times more funds to start their business than non-innovative entrepreneurs from innovation-driven economies (Daniels et al., 2016: 7). These entrepreneurs are also more likely to be turned down for financing than others, and this situation worsened significantly in the wake of the 2008 financial crisis (Lee et al., 2015: 370). Innovativeness, especially among early-stage enterprises, can increase the already high level of risk related to these businesses. Thus, early-stage innovative businesses perceive, on average, more financial constraints than established innovative businesses (Schneider, Veugelers, 2010). The role of firm's innovativeness in obtaining financial funds is vague. Despite the fact that some previously mentioned research findings claim that innovative businesses may have difficulties in acquiring and obtaining financial resources, other research has shown that innovativeness can even provide better access to financial resources, especially to venture capital investments (Engel, Keilbach, 2007) or to the business

angels' capital investments (Bilau, Sarkar, 2016), because it may create strategies that could lead to fast growth and high profitability. Innovativeness, especially from a technological point of view, causes major investments into new technologies, and because of that, innovative enterprises will very likely need to use more types of financial resources to cover all their financial needs.

Due to the increased financial needs of innovative entrepreneurs and increased usage of financial resources, we believe that the share of entrepreneurs' own financial resources, given the total financial resources needed, will be smaller for these entrepreneurs, as compared to non-innovative entrepreneurs whose financial needs are smaller.

On the basis of past research results presented above, we created the following hypotheses:

H1: Innovative early-stage entrepreneurs, on average, use more diversified financial sources than non-innovative early-stage entrepreneurs.

H2: Innovative early-stage entrepreneurs, on average, use a smaller share of their own financial resources than non-innovative entrepreneurs.

Since innovativeness is studied from three different aspects in this research, the following three research hypotheses are formed with the purpose to test H1:

H1(A): Early-stage entrepreneurs that offer products/services that are new to all consumers, on average, use more diversified financial sources than early-stage entrepreneurs who don't.

H1(B): Early-stage entrepreneurs who operate in markets without competitors, on average, use more diversified financial sources than early-stage entrepreneurs who don't.

H1(C): Early-stage entrepreneurs who use new technologies that are available on the market for less than a year, on average, use more diversified financial sources than early-stage entrepreneurs who don't.

For testing H2, three research hypotheses are formed as well:

H2(A): Early-stage entrepreneurs who offer products/services that are new to all consumers, on average, use a lower share of own financial resources than early-stage entrepreneurs who don't.

H2(B): Early-stage entrepreneurs who operate on market without competitors, on average, use a lower share of own financial resources than early-stage entrepreneurs who don't.

H2(C): Early-stage entrepreneurs who use new technologies that are available on the market less than a year, on average, use a lower share of own financial resources than early-stage entrepreneurs who don't.

Another important element in the past entrepreneurial research was demographic characteristics of entrepreneurs. Here, we limited our research only to the age and gender of early-stage entrepreneurs, since they are the most commonly used demographic factors (often in the context of control variables) in previous entrepreneurial studies.

The age of entrepreneurs can play an important role in deciding on the usage of diverse financial resources, as small business finance literature suggests that older entrepreneurs tend to be less willing to invest additional finances into their businesses (Romano et al., 2001: 294). As shown in research of Romano et al. (2001), external equity seeking is less likely to be a consideration for older family business entrepreneurs and those who have a strong preference for retaining control. The logic from family business studies can be, in our opinion, transferred to early-stage entrepreneurs' financial decision-making process. Although the entrepreneur's age was found to enhance capital acquisition and improve the ease of obtaining resources (Neeley, Van Auken, 2010: 25), it was also found that older and more "rigid" entrepreneurs seem to have more difficulty in the finance acquiring process (Hustedde, Pulver, 1992). The reason for this could be the flexibility of younger entrepreneurs and their less traditional behaviour.

On this basis, we have formed the following hypotheses:

H3: Younger early-stage entrepreneurs, on average, use more diversified financial sources, as compared to their older counterparts.

H4: Older early-stage entrepreneurs, on average, use a higher share of their own financial resources, as compared to their younger counterparts.

The next important demographic characteristic is gender. Some past research studies have shown that gender has an important role in enterprise financing, in a way that a greater proportion of female entrepreneurs perceived financial barriers as important constraints in their business, as compared to their male counterparts (Kwong et al., 2012: 75). This is in line with findings of Roper and Scott (2009) that women may face or perceive greater bar-

riers in start-up phases, but at the same time, they also didn't find any evidence that this is likely to have a significant effect on differences regarding the start-up activities of women, as compared to men (ibid, 2009: 162). The findings also show that financial resource providers' (for example microfinance institutions) preferences for female borrowers varies internationally, but the fact that microfinance institutions focus on female borrowers is generally attributed to two reasons: trustworthiness and greater social impact (Aggarwal et al., 2015). Next, there is the debate if gender has an influence on financial decisions made by entrepreneurs. Jia et al. (2008: 573) have shown that female entrepreneurs most often choose sole-funded business structures, and that their main financial resources of initial funding are their own savings and borrowing from family members, relatives, and friends.

The effect of gender on financing is, therefore, vague. We believe that these positive and negative impacts negate each other, which has been shown in a study of Neeley and Van Auken (2010), where findings suggest that bootstrap finance methods (resources from family and friends—informal types of financial resources) were similar among female- and male-owned small enterprises.

Because of that, we have formed the following hypotheses:

H5: Male and female early-stage entrepreneurs, on average, do not differ regarding the diversity of financial sources used.

H6: Male and female early-stage entrepreneurs, on average, do not differ regarding the share of own financial resources used.

Demographic factors can also influence the growth aspirations of entrepreneurs. Growth requires substantial financial resources (Moreno, Casillas, 2007: 75), so this could result in the financial decisions made by early-stage entrepreneurs about the diversity of financial resources needed or about the share of entrepreneurs' own financial resources provided for the enterprise. On the basis of the data available, we cannot say that, in Slovenia, male entrepreneurs have higher growth aspirations than female entrepreneurs (Tominc, Rebernik, 2006: 47), but nevertheless, the topic of growth aspirations within the financial context is beyond the focus of this research.

3. Methodology and data

3.1 Sample characteristics

This empirical research is based on GEM national data of the Republic of Slovenia for the year 2015. A random sample consists of 2,009 individuals belonging to the adult (18-64 years) population. Within GEM research the early-stage entrepreneurs were identified ($N = 119$). For testing hypothesis H1, H3 and H5 the complete data basis consisted of 72 early-stage entrepreneurs, while for H2, H4, and H6 the complete data basis consisted of 42 early-stage entrepreneurs.

Early-stage entrepreneurs included in the sample don't use many different types of financial sources. More than two-thirds of entrepreneurs (approximately 71%) don't use any of the studied financial sources or they use only one of the seven possible types. The percentage of entrepreneurs using several different types of financial sources is low. Only 4% of entrepreneurs have indicated that they use four of the seven possible types of financial sources. In our sample there were no entrepreneurs who would use five or more types of financial sources.

The share of entrepreneurs' own resources provided by the early-stage entrepreneurs themselves in Slovenia is, on average, approximately 73% of all used fi-

nancial resources, which places Slovenia in the upper half of European countries (Daniels et al., 2016: 24).

Our sample of 72 early-stage entrepreneurs consisted of 54 (representing 75%) male entrepreneurs and 18 (representing 25%) female entrepreneurs. Similar ratios between male and female entrepreneurs can be found in the majority of innovation-driven countries (Rebernik et al., 2016: 25). The age pattern of entrepreneurship activity is relatively homogenous all over the world. The highest participation rate is among the 25- to 34-year-olds (ibid, 2016: 24). These age patterns also apply to our sample of early-stage entrepreneurs. Entrepreneurs aged between 25 and 34 represent approximately 44% of all early-stage entrepreneurs included in our research, followed by entrepreneurs aged between 35 and 44 (representing 26%) and 45 and 54 years (18%). The age groups of 18-24 and 55-64 have the smallest proportion of early-stage entrepreneurs (in each category, approximately 6%). The youngest early-stage entrepreneur is 22 years old, and the oldest is 62 years old. The average age of early-stage entrepreneurs included in our sample is 36 (Standard Deviation = 10.456).

3.2 Variables

In the next three tables, we describe the variables used.

Table 1 The number of financial resources used and the share of entrepreneurs' own financial resources provided

Variable	Design and values
Number of financial sources used	For each type of financial resource ² : Dichotomous variable (0 – doesn't use; 1 – does use) is formed. The number of financial resources used by each early-stage entrepreneur is established.
Share of own financial resources provided	Continuous numeric variable with value from 0 to 100 percent.

Source: GEM Slovenia 2015 database

Table 2 Innovativeness variables

Variable	Design and values ³
Innovativeness in the aspect of novelty to the consumers	Dichotomous variable (0 – enterprise offers products/services which are already known to some or all (potential) customers; 1 – enterprise offers products/services that are new to all customers)
Innovativeness in the aspect of competitors	Dichotomous variable (0 – enterprise operates in markets with few or many competitors; 1 – enterprise operates in markets with no competitive businesses)
Innovativeness in the aspect of used technology	Dichotomous variable (0 – enterprise uses technologies that are available on the market for more than a year (not new technologies); 1 – enterprise uses technologies that are available on the market for less than a year (new technologies))

Source: GEM Slovenia 2015 database

The literature review, described in Section 2 of this article, revealed the importance of demographic factors, especially gender and age. Because of that, an important part of our research paper is focused on

researching the relationships between these two demographic variables and financial resources diversity and the share of their own financial resources provided by the early-stage entrepreneurs in Slovenia.

Table 3 Demographic variables

Variable	Design and values
gender	Dichotomous variable (0 – male; 1 – female)
age	Dichotomous variable (0 – entrepreneurs that are up to 34 years old; 1 – entrepreneurs that are 35 years old or older)

Source: GEM Slovenia 2015 database

3.3 Methodology

To test the research hypotheses, we have used IBM SPSS Statistics 24.0 software. The research hypotheses were tested using non-parametric testing for differences between two independent samples – using the Mann-Whitney U test – since the variables analysed were not normally distributed (Shapiro-Wilks and Kolmogorov-Smirnov tests⁴). The Mann-Whitney U test is a non-parametric test that is used to test statistical differences in mean ranks for two independent groups, where the variable studied is not normally distributed. To use the Mann-Whitney U test, several assumptions must be fulfilled. These assumptions are: numeric dependent variables and dichotomous independent variables, as well as independence between the groups included.

Simultaneously with the test results, the descriptive statistics results are presented.

The 5% significance level was used to test the hypotheses.

4. Empirical results and discussion

Table 4 shows the results of testing H1(A), H1(B), and H1(C). The results were supplemented with the average number of financial sources used. The share of early-stage entrepreneurs who are innovative regarding a particular aspect of innovativeness (entrepreneurs who offer products that are new to all consumers, operate in the industry without any competing businesses, or use technology that is available on the market for less than a year) is between approximately 10% and 20% of all early-stage entrepreneurs.

Table 4 Innovativeness and number of financial resources used

		Early-stage entrepreneurs (N)	Mean Rank	Mean (number of financial sources)	Asymp. Sig (2-tailed)
Innovativeness in the aspect of novelty to the consumers	non-innovative	58	35.55	1.10	0.410
	innovative	14	40.43	1.36	
Innovativeness in the aspect of competitors	non-innovative	63	35.79	1.13	0.425
	innovative	9	41.44	1.33	
Innovativeness in the aspect of technology used	non-innovative	64	33.70	1.00	0.001
	innovative	8	58.88	2.38	

Source: Own calculations based on GEM, Adult population survey Slovenia, 2015

In the fourth column of Table 4, the average (mean) ranks are presented, which in our case indicate that preferences for usage of more diverse financial sources (in other words, usage of financial resources from more providers) differ between groups of in-

novative or non-innovative entrepreneurs, regardless of the studied aspect of innovativeness. As presented in Table 4, regarding all three aspects of innovativeness, innovative entrepreneurs, on average, use more diversified financial sources, but the

difference is statistically significant only in the case of innovativeness from a technological point of view ($p < 0.05$). Thus, the conclusion is that early-stage entrepreneurs who use the technologies that are available on the market for less than a year, on average, use more different types of financial sources (on average 2.38 different types of financial sources) as compared to those who use older technologies (on average 1.00 financial source). Therefore H1(A) and H1(B) are rejected, while H1(C) is not rejected.

By testing the hypotheses H1(A), H1(B) and H1(C) we found that the first hypothesis H1 can be partly confirmed. GEM defines innovativeness from three different aspects, which include costumers, competitors, and technologies. Thus it is crucial to study innovativeness through these different aspects and not as a homogeneous phenomenon that bundles all aspects of innovativeness together. The results of empirical study confirm the hypothesis from the standpoint of technological view of innovativeness and not from the number of (potential) customers or competitors' view-point.

In the international comparisons, it is shown that differences between innovative and non-innovative entrepreneurs regarding the average (median) amount of financial resources required are highest in North America (Daniels et al., 2016: 40). Differ-

ences are also obvious in other innovation-driven economies around Europe. In innovation-driven economies, innovative entrepreneurs need about 1.5 times more funds to start their business than non-innovative entrepreneurs. On average, European innovative entrepreneurs need approximately 20,000 € to start a business and non-innovative entrepreneurs only approximately 15,000 € (ibid). This difference between innovative and non-innovative entrepreneurs is obvious also in our research. Analysis of median values of total money required to start a business with regard to technological innovations has shown that innovative early-stage entrepreneurs in our sample, on average, need approximately 30,000€, and non-innovative early-stage entrepreneurs only need approximately 10,000€, when analysing the technological aspect of innovativeness. Therefore, they will probably use more diverse financial resources to reach the expected amount. This statement is supported by results of statistical analysis of correlation. The correlation coefficient between the average amount of financial resources used and financial source diversity (number of used types) is 0.317, and it is statistically significant ($p = 0.030$), indicating the positive linear relationship between variables: the higher the amount of financial resources needed, the higher, on average, the number of financial sources used.

Table 5 Innovativeness and share of own financial resources provided by the early-stage entrepreneur

		Early-stage entrepreneurs (N)	Mean Rank	Mean (In %)	Asymp. Sig (2-tailed)
Innovativeness in the aspect of novelty to the consumers	non-innovative	34	22.94	0.78	0.077
	innovative	8	15.38	0.51	
Innovativeness in the aspect of competitors	non-innovative	35	22.11	0.75	0.413
	innovative	7	18.43	0.63	
Innovativeness in the aspect of used technology	non-innovative	38	22.32	0.76	0.134
	innovative	4	13.75	0.46	

Source: Own calculations based on GEM, Adult population survey Slovenia, 2015

Table 5 presents the differences between average shares of financial resources provided by early-stage entrepreneurs themselves separately for non-innovative and innovative early-stage entrepreneurs in relation to different aspects of innovativeness.

In the sample, as can be seen from the mean ranks, innovative entrepreneurs (regarding all three aspects of innovativeness) have lower preferences to

use their own financial resources. That is confirmed by analysing the average (mean) share of their own financial resources provided by innovative entrepreneurs in comparison to non-innovative early-stage entrepreneurs. In all aspects of innovativeness, innovative entrepreneurs in the sample use lower shares of their own financial resources, as compared to non-innovative early-stage entrepreneurs.

This is in line with expectations that entrepreneurs who want to achieve innovativeness usually need more financial resources, and this can lead to the situation that the share of their own financial resources is smaller (although it may not be smaller in terms of absolute values in monetary units). Innovative entrepreneurs, in that way, cover their financial needs not with their own financial resources, but with external sources of financing to a larger extent. This is in line with findings that innovative entrepreneurs have more need for external financial resources (Lee et al., 2015: 379).

However, the sample differences are not statistically significant ($p > 0.05$). Therefore, hypotheses H2(A), H2(B), and H2(C) are rejected.

Therefore, the hypothesis H2 can also not be confirmed.

Tables 6 and 7 refer to the differences in the diversity of financial sources used and differences of the share of entrepreneurs' own financial resources provided, both regarding the age of early-stage entrepreneurs; the results of testing H3 and H4 are presented.

Table 6 Age of entrepreneurs and number of financial resources used

		Early-stage entrepreneurs (N)	Mean Rank	Mean (number of financial resources)	Asymp. Sig (2-tailed)
Age	34 or less	36	41.75	1.44	0.025
	35 or more	36	31.25	0.86	

Source: Own calculations based on GEM, Adult population survey Slovenia, 2015

From a total of 72 early-stage entrepreneurs in the sample, exactly half of them (N = 36) belong to the younger generation.

From the average (mean) rank, we can see that this rank is higher in the group of younger entrepreneurs, meaning that they have, on average, higher preferences for usage of more diverse financial sources from more different providers. This is reflected also in the mean values, indicating that younger entrepreneurs, on average, use more than

one type of financial sources (out of seven possible forms), and that older entrepreneurs in a sample, on average, use less than one type of financial sources.

The difference is statistically significant ($p < 0.05$). Because of that, hypothesis H3 is not rejected — younger entrepreneurs indeed use more types of financial sources than older entrepreneurs. Table 7 refers to the analysis of the age of early-stage entrepreneurs and the share of their own financial resources provided.

Table 7 Age of entrepreneurs and share of own financial resources, provided by the early-stage entrepreneur

		Early-stage entrepreneurs (N)	Mean Rank	Mean (share)	Asymp. Sig (2-tailed)
Age	34 or less	23	17.78	0.60	0.015
	35 or more	19	26.00	0.88	

Source: Own calculations based on GEM, Adult population survey Slovenia, 2015

The mean rank is higher in the group of older entrepreneurs (entrepreneurs who are 35 or older), indicating that these entrepreneurs, on average, have higher preferences to use their own financial resources. This is reflected also in the mean values, indicating that younger entrepreneurs, on average, use approximately two-thirds of their own financial resources and only one third of external financial resources. On the other hand, older entrepreneurs depend more on their own financial resources.

The difference is statistically significant ($p < 0.05$). Because of that, hypotheses H4 is not rejected — older entrepreneurs indeed have a significantly higher share of their own financial resources in the total amount of financial resources.

These results are also in line with the previous findings from past research, which suggests that older entrepreneurs tend to be less willing to invest additional finances into their businesses, and that

older family business owners will less likely show the interest for external equity seeking, because they have a strong preference for retaining control (Romano et al., 2001), meaning that they will use and rely more on their own financial resources. This logic is also confirmed by hypotheses H3 and H4, since older entrepreneurs use, on average, less diversified financial sources and have higher preferences to use their own financial resources, as compared to those who are younger. The reason for this could be the fact that young people often have no credit history or assets to serve as collateral in order to secure loans from financial institutions. In the 25- to 34-age cohort, in addition, individu-

als may not yet reach the career position offering high salaries and perks (less opportunity cost) or they may have fewer financial obligations, such as families to support and loan repayments (Daniels et al., 2016: 31), which could lead them to more innovative approaches and more flexibility in the finance acquisition process. But on the other hand, older entrepreneurs have had time to develop their skills and knowledge through education, as well as through work experience, building their confidence in their own abilities and their networks, which could increase the possibility of better access to finance, and they may have accumulated other resources, such as personal savings (ibid).

Table 8 Gender and number of financial sources used

		Early-stage entrepreneurs (N)	Mean Rank	Mean (number of financial resources)	Asymp. Sig (2-tailed)
Gender	male	54	36.56	1.17	0.967
	female	18	36.33	1.11	

Source: Own calculations based on GEM, Adult population survey Slovenia, 2015

Table 8 shows gender differences between early-stage entrepreneurs regarding the diversity of financial resources. As we can see, the differences between male and female entrepreneurs are very small. The difference between male and female en-

trepreneurs is also not statistically significant ($p > 0.05$). Because of that, hypothesis H5 — male and female early-stage entrepreneurs, on average, do not differ regarding the diversity of financial resources used — is not rejected.

Table 9 Gender and share of own financial resources provided

		Early-stage entrepreneurs (N)	Mean Rank	Mean (In %)	Asymp. Sig (2-tailed)
Gender	male	33	21.18	0.72	0.717
	female	9	22.67	0.76	

Source: Own calculations based on GEM, Adult population survey Slovenia, 2015

In Table 9, results for testing H6 are presented. Gender differences regarding the usage of entrepreneurs' own financial resources are minimal. In the sample, male entrepreneurs, on average, use 72% of their own financial resources whereas female entrepreneurs provide 76% of total financial resources needed.

The difference isn't statistically significant. Because of that, hypothesis H6 — male and female early-stage entrepreneurs, on average, do not differ regarding the share of own financial resources used — is not rejected.

Previous entrepreneurial research findings that deal with the gender perspective indicate the possibility of both positive and negative impacts of gender on enterprise financing or on financial decisions made

by entrepreneurs (in relation to barriers, accessibility, and networking). Findings in GEM Entrepreneurial Finance report shows that, in Slovenia, female and male entrepreneurs need on average the same amount of finance to start their enterprises (on average approximately 10,000€) (Daniels et al., 2016: 30). From this we can conclude that gender differences regarding the diversity of financial resources used also don't exist, and this was shown by the results in the Tables 8 and 9.

5. Conclusion

The aim of this research is to analyse different characteristics of financial resources of Slovenian early-

stage entrepreneurs regarding the differences in their innovativeness and demographic factors. Our empirical research focuses on analysing the average number of types of financial sources used and, on average, the share of entrepreneurs' own financial resources provided between innovative and non-innovative groups of early-stage entrepreneurs and groups broken down by gender and age.

Our research focuses on one of the key challenges of the modern entrepreneurial process, which is the issue of acquiring and obtaining financial resources. Their availability is, in fact, one of the key elements in the development and in the growth process of small- and medium-sized enterprises⁵, where we can find most of the enterprises belonging to early-stage entrepreneurs.

The results show that innovativeness, especially from a technological point of view, can create statistically significant differences in the average number of used types of financial sources between innovative and non-innovative early-stage entrepreneurs.

Despite the fact that some previous research findings sometimes define innovative businesses as those that may have difficulties in acquiring and obtaining financial resources, other research has shown that innovativeness can enable better access to venture capital investments (Engel, Kelbach, 2007) or to the business angels' capital investments (Bilau, Sarkar, 2016). The key element is that innovative enterprises/entrepreneurs have higher financial needs, and because of that, they will need to use more external financial resources. This is also confirmed by the results of our empirical research, which indicates that innovative entrepreneurs, on average, use more diverse financial sources, but the difference is statistically significant only from the technological point of view.

In the empirical research, we have also examined the connection between two demographic factors (age and gender) and the average number of financial sources used, as well as regarding the average share of financial resources provided by early-stage entrepreneurs. The results confirmed previous research findings of statistically significant effect of entrepreneurs' age on the financial sources used and on the share of entrepreneurs' own financial resources. Thus, younger entrepreneurs, on average, use more types of financial sources and consequently a smaller share of their own financial resources. Unlike entrepreneurs' age, gender differences were

not found to be significant. Nevertheless, we would like to point out that research studies regarding entrepreneurship are extremely heterogeneous, meaning they cannot be simply compared to each other, because different samples of entrepreneurs represent different characteristics of selected enterprises or characteristics of national entrepreneurship ecosystems.

Our research represents an important contribution to the understanding of Slovenian early-stage entrepreneurs' financing, since it deals with the connection between innovativeness, demographic factors, and financial decisions of early-stage entrepreneurs, which has not been analysed so far.

This paper also allows us to see the wider picture of entrepreneurs' decisions within the Slovenian entrepreneurial ecosystem in comparison with the international context of GEM. As presented in the paper, Slovenian innovative early-stage entrepreneurs (technological point of view) have more financial needs than average innovative entrepreneurs in Europe. Innovative and non-innovative entrepreneurs in Slovenia are also more prone to use own financial resources than many entrepreneurs from other European countries. This could indicate that Slovenian policy makers should put their efforts into enabling financial diversity by establishing access to several external financial sources. Also many of the previous models of entrepreneurial finance remain relevant today, including informal investment through the founders themselves, as well as borrowing from friends, family, and colleagues. Venture capital (VC) investments, particularly in developed economies, remain important for high-impact enterprises. However, newer financing models, including business angels, microfinance, and small business accelerators, have matured considerably over the past 10 years (Daniels et al., 2016: 4), and if policy makers want to create potential for prosperity, they need to be flexible in regard to fast-changing global economy.

5.1 Limitations and opportunities for future research

This research includes some important limitations. First, our research is limited to the data from the GEM database. Although this could represent a disadvantage, due to the limitations of preselected data, the possibility of international comparisons provides clear advantages. Second, our research is limited to the analysis of nascent and new en-

trepreneurs (early-stage entrepreneurs) and to the following factors: innovativeness, gender, and age. This research is also limited to entrepreneurs in the Republic of Slovenia and covers the situation during the year 2015.

Limitations, on the other hand, represent the opportunities for future research. It is possible to redirect attention from early-stage entrepreneurs to the established entrepreneurs and to the financial resources that are needed in different stages of the

entrepreneurial life-cycle. An important element of further research can also include the examination of other influential factors, not only the innovativeness, gender or age.

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(ENDNOTES)

- 1 International Finance Corporation (2011), "SME Finance Policy Guide", available at: https://www.ifc.org/wps/wcm/connect/f3ef82804a02db409b88fbd1a5d13d27/G2o_Policy_Report.pdf?MOD=AJPERES (Accessed on: March 20, 2017)
- 2 Financial resources from: family, friends, employers, banks, private/VC investors, government, crowdfunding platforms
- 3 For specific aspect of innovativeness the value 0 represents non-innovative enterprises (entrepreneurs) and value 1 innovative enterprises (entrepreneurs)
- 4 On the basis of Shapiro-Wilks and Kolmogorov-Smirnov tests we can reject the null hypotheses that variables used in our research are normally distributed at the significance level lower than 5% (statistical significance of Shapiro-Wilk and Kolmogorov-Smirnov for each variable (variables are represented in Tables 1-3): $p < 0,05$).
- 5 International Finance Corporation (2011), "SME Finance Policy Guide", available at: https://www.ifc.org/wps/wcm/connect/f3ef82804a02db409b88fbd1a5d13d27/G2o_Policy_Report.pdf?MOD=AJPERES (Accessed on: March 20, 2017)

Blaž Frešer
Polona Tominc

INOVATIVNOST I RAZNOLIKOST FINANCIRANJA KOD SLOVENSКИH PODUZETNIKA U RANOJ FAZI POSLOVANJA

SAŽETAK

U ovom se radu obrađuje raznolikost financijskih sredstava kojima se koriste slovenski poduzetnici u ranoj fazi poslovanja. U empirijskoj smo studiji promatrali poduzetnike u ranoj fazi poslovanja s različitim karakteristikama u pogledu inovativnosti i pokušali utvrditi razlikuju li se i u načinu financiranja. Pritom smo analizirali prosječan broj korištenih vrsta financijskih sredstava i prosječan udio vlastitih sredstava koja su na raspolaganju. U analizi su se uzele u obzir i demografske karakteristike (dob i spol) poduzetnika u ranoj fazi poslovanja. Na temelju rezultata može se zaključiti da postoje razlike u raznolikosti korištenih financijskih sredstava između grupa poduzetnika u ranoj fazi poslovanja u odnosu na različite aspekte njihove inovativnosti. Međutim, statistički značajna razlika uočena je samo u pogledu tehnološke inovativnosti. Nadalje, rezultati pokazuju statistički značajne razlike između grupa poduzetnika razvrstanih po dobi u odnosu na broj korištenih financijskih sredstava i na udio vlastitih sredstava. S druge strane, u istoj varijabli nije bilo statistički značajnih razlika u odnosu na spol ispitanika.

Ovo se istraživanje temelji na podacima organizacije Global Entrepreneurship Monitor (GEM) za Sloveniju. S obzirom na veliki broj zemalja koje sudjeluju u svjetskom GEM istraživanju, rezultate analize moguće je uspoređivati na međunarodnoj razini. Stoga je ovo istraživanje važan doprinos razumijevanju ponašanja poduzetnika u ranoj fazi poslovanja u kontekstu pojedinačne zemlje.

Ključne riječi: financiranje, vlastita financijska sredstva, inovativnost, demografski faktori, poduzetnici u ranoj fazi poslovanja

Julia Perić

Josip Juraj Strossmayer
University of Osijek
Faculty of Economics in Osijek
Trg Ljudevita Gaja 7,
31000 Osijek, Croatia
julia@efos.hr
Phone: +385912244074

Borna Turalija

Ivana Gundulića 242,
31000 Osijek, Croatia
turalija.b@gmail.com
Phone: +38598871089

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CORPORATE SOCIAL RESPONSIBILITY AS AN IMPORTANT FACTOR OF BUSINESS SUCCESS IN CROATIAN COMPANIES

ABSTRACT

Corporate social responsibility (CSR) is becoming an increasingly important subject of public discussion because application of this concept does not only affect company's business, but also the narrow and the wider community in which the company operates. The Republic of Croatia is an example of daily exposure of political and economic scandals, and the question arises to what extent the community and society are truly informed about the activities of many companies, and if there are written or unwritten laws and rules that seek to ensure adequate presence of morality in daily operations. The purpose of this study is to research the frequency of application of the concept of corporate social responsibility and code of ethics in companies (both public and private) in the Republic of Croatia and their effect. The paper tries to answer two research questions: a) how do Croatian companies perceive corporate social responsibility, and b) is there a link between corporate social performance of the company and signing the Code of business ethics. The empirical part of the paper is based on an anonymous survey of 95 respondents employed in different companies. The following parameters were investigated: respondents' sociodemographic characteristics, familiarity with the concept of CSR, application in companies, year of introduction in the company, areas of application, and the effect that the application of corporate social responsibility has on the company. Furthermore, the level of presence of the code of ethics, and its availability and success in preventing non-ethical behaviour in companies were examined. The application of CSR and ethical business practice in Croatia has been rising in the past decade, but in order for the implementation to be fully successful, detailed changes of educational, economic and political systems are necessary.

Keywords: Corporate social responsibility, Croatian companies, business ethics

1. Corporate social responsibility – the beginning and development

Although it is not possible to determine the exact time period in which corporate social responsibil-

ity appeared as a concept in general, Bežovan (2002) believes that certain forms of this type of business conduct appeared as early as the Middle Ages, more precisely, at the end of the 14th century. At that time, the concept of CSR was associated with flour-

ishing of different fields of commerce, and there is evidence that this kind of progress and flourishing of trade led to increased financial investments in institutions of public interest, such as hospitals, schools and orphanages, which, in addition to the betterment of traders themselves, greatly contributed to the betterment of the wider community. Delić (2013) states that more active engagement to integrate the concept of CSR in different types of economic operations took place in the late 19th and early 20th century because of the emergence of the industrial revolution as a major historical turning point. The beginning of corporate social responsibility as voluntary business practice is related to the year 1983, namely, the establishment of *Business in the Community*, an English non-profit organisation whose main objective is the promotion of corporate social responsibility. The infamous 1995 scandal with Nike's footballs, which revealed that children's forced labour was in fact behind company's falsely presented corporate social responsibility, enabled the establishment of *CSR Europe*, the first European organisation for the promotion of corporate social responsibility, which was considered more than necessary. Today it is considered one of the largest business networks for promoting responsible business practices and brings together more than 5,000 entrepreneurs from all over Europe (Petričević, 2014).

Triple bottom line (or otherwise noted as TBL) is the most comprehensive approach to achieving sustainable business performance (i.e., integrating economic, environmental and social aspects into core business) (Dweyer, 2015). The triple bottom line model is focused on sustainable development through the mechanisms of planning, decision-making and reporting, with two major assumptions: compliance with the law and fulfilment of obligations that it imposes, and efforts to achieve more than the mere observance of the law, through moral responsibility and environmental awareness. Capital appears in three forms: financial capital, natural capital and social capital. According to Dweyer (2015), the ability of the company to survive in a healthy condition for as long as those who are running it want to, stems from achieving a positive and balanced return on each of the three forms of capital that make up the triple bottom line. According to the triple bottom line model, making profits is a legitimate process of doing business, but companies that want to create a reputation as a socially responsible organi-

sation should base their business operations on a developed and socially responsible relationship with all stakeholders.

Petričević (2014) also stresses the importance of the TBL model, which was in 1996 included as a key element of the ISO 14001 quality system (Environmental Management System), and a year later as an element of the SA8000 Standard (Standard for auditing and certification of conformity for social accountability).

The importance of corporate social responsibility is confirmed by various global movements, initiatives, international regulations and reports. One such major initiative is the Global Compact, an initiative launched by the UN in 2010, which defines *10 principles of corporate social responsibility* aimed at encouraging companies to be socially responsible and to support the basic values through their operations:¹

Human Rights

- Principle 1 Businesses should support and respect the protection of internationally proclaimed human rights; and
- Principle 2 Make sure that they are not complicit in human rights abuses.

Labour

- Principle 3 Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
- Principle 4 The elimination of all forms of forced and compulsory labour;
- Principle 5 The effective abolition of child labour; and
- Principle 6 The elimination of discrimination in respect of employment and occupation.

Environment

- Principle 7 Businesses should support a precautionary approach to environmental challenges;
- Principle 8 Undertake initiatives to promote greater environmental responsibility; and
- Principle 9 Encourage the development and diffusion of environmentally friendly technologies.

Anti-Corruption

- Principle 10 Businesses should work against corruption in all its forms, including extortion and bribery.

The most recent released social responsibility guidance standard ISO 26000 is focused on providing companies with assistance in operating in a socially responsible way that ethically and transparently contributes to the health and welfare of society.² According to Zinenko et al. (2015) the goal of ISO 26000 is to provide guidance on managing social responsibility in the areas of human rights, labour practices, environment, fair operating practices, organisational governance, community involvement and development, and consumer issues. The authors state that the main achievement of ISO 26000 is the agreement on several CSR definitions developed by 450 multi-stakeholder experts, and being a guidance standard, it does not require third-party certification.

Focusing on achieving financial gain without thinking about consequences of such operations has negatively affected the functioning of man as a member of the community and its impact on overall social and environmental development. Just as Rifkin (1989) predicted, humanity is today confronted with reduction of non-renewable Earth's energy reserves, dangerous creation of gases that increase global temperature and gradual decline of biodiversity, which is another reason why corporate social responsibility is increasingly viewed as a lifeline without which sustainable and social development of any country cannot be achieved.

1.1 Corporate social responsibility in Croatia

It is believed that corporate social responsibility as a concept included in various activities emerged under the influence of various economic, social and political factors that have operated on the territory of today's Republic of Croatia throughout history. According to Vrdoljak-Raguž and Hadžovac (2014: 47), the beginnings of this concept in the region have been recorded in the time of socialism, which was primarily based on the principles of "social ownership" as opposed to the system of "state ownership", which at that time was popular in communist countries such as the USSR. The principle of "social ownership", to a certain extent, represented corporate social responsibility, i.e., activity, primarily in the spheres of improvement of workers' rights, care for children, disabled and athletes, while environmental protection and sustainable development were given almost no importance, and in that case, there can be no talk about the adoption of the con-

cept of corporate social responsibility. Regardless of the good predispositions in the period from 1945 to 1990, the economic development of the Republic of Croatia was nevertheless extremely weak. Given the wartime events and devastation, even the process of transition from socialism to capitalism did not allow adequate development of the Croatian economy, and the processes that accompany the transition, such as transformation and privatisation, have led to further damage to the Croatian economic system, in particular due to a large number of acts of corruption, the consequences of which are greatly felt to this day.

It may be said that Croatian membership in the European Union was the main trigger for the introduction of the concept of social corporate responsibility in everyday work and activities, and a major effort will be needed for the regulation and harmonisation of different social and business norms that will provide preconditions for the full adoption of this concept. A step towards this was made by the introduction of the Code of Business Ethics, which was adopted by the Croatian Chamber of Economy in 2015, as well as by the establishment of the National Network for Corporate Social Responsibility, an independent umbrella body composed of public, private and civil sector organisations, which brings together various stakeholders interested in the development of corporate social responsibility (Šijaković et al., 2013).

1.2 Areas of application of corporate social responsibility

Corporate social responsibility as a concept can be applied in different areas of business, both within and outside the company. It is often used within the company to ensure the attraction and retention of highly valuable employees by applying some kind of continuing education for employees. In addition, it is endeavoured to ensure safe conditions for preserving the health and safety of each employed individual, both by complying with the laws and norms and by implementing voluntary activities for their protection. Special attention is often given to particularly vulnerable groups, such as women, younger employees with less work experience and the need to learn, but also the elderly and workers with special needs. Besides taking care of human resources, continuous changes within the company are an important factor, taking place in the form of

restructuring costs and adopting new strategies, seeking to involve all the company's stakeholders in these processes. On the outside, the company seeks to adopt and promote regular practice of caring for the environment. Efforts are made to decrease the negative effects through the rational use of energy resources, reduction of emissions of various harmful substances into the soil, air and water, but also by increasingly frequent concern for conscientious disposal, collection, and recycling of waste. It is unavoidable to once again emphasize the activities in the local and wider communities, in the form of helping various non-profit organisations or associations involved in charitable or humanitarian work, often in the form of sponsoring of various educational projects for children and youth, as well as through reconstruction of infrastructure of major importance for the wider community, such as hospitals, schools and kindergartens (Krkač, 2007: 386). Corporate social responsibility can have an effect on the psyche and behaviour of the end consumer, which is mostly achieved through marketing, which, it can be argued, has the most important role in the sale of products today, and so the application of this business concept has significantly expanded into the field of marketing. Using social responsibility to influence consumers and their product selection is becoming more and more frequent (Becker-Olsen, 2005). Srblijinović (2012) believes that by using the concept of social responsibility in marketing companies can influence the decision-making about the purchase of a particular product. Consumers today have a much greater awareness of certain social values, and more often expect companies to demonstrate compliance and orientation towards these values. There is evidence that those companies whose values consumers identify with achieve better profit results, while companies that have been deemed socially irresponsible by consumers are often penalised because of that (Leko Šimić, Štimac, 2009). Some of the marketing campaigns implemented in the field of corporate social responsibility, recognised as positive by the consumers are those that deal with various health issues (breast cancer, HIV, smoking, alcoholism, etc.), preventing traffic accidents and suicide, preservation of the environment as a whole (protection of water, air, soil, saving electricity, recycling, etc.) and issues related to social engagement, such as fight against crime, voluntary donation of organs or blood, and many others (Kotler, Lee, 2009: 116).

1.3 Positive effects and challenges of application of CSR on the company

It can be safely argued that any form of corporate social responsibility has numerous benefits in different sectors of business. These positive business effects include the ability to retain regular buyers and clients who recognise ethical and socially responsible business conduct and show their support by being loyal to a certain product or service. Acquiring new buyers or clients who identify their personal views and goals with the socially responsible objectives of the company is also considered positive. Enterprises sometimes use corporate social responsibility to distinguish themselves from other companies since such business conduct improves their reputation in the long-term and builds possibilities for opening new market opportunities.

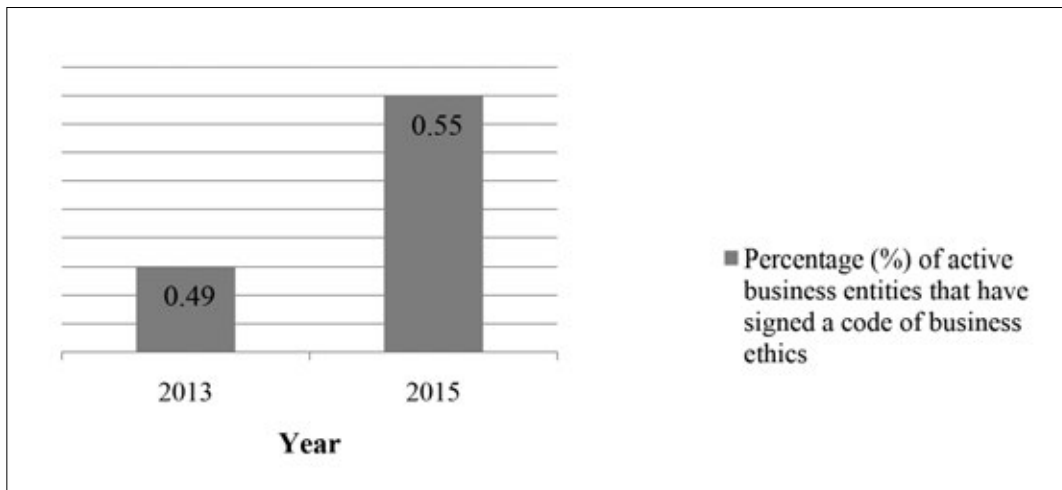
One of the positive effects is the strengthening of corporate image because companies, by showing that they operate in such a way, do not only meet, but also exceed the prescribed requirements. In addition to the positive effect on company competitiveness, this kind of business conduct may also cause a positive effect on the environment in which the company operates, as well as on the working environment, i.e., company employees themselves, as it allows attracting, and later motivation and retention of good workforce and satisfied workers. Corporate social responsibility has a positive impact on relations with other stakeholders and often leads to improved financial performance of the company and sustainable business. Besides the benefits, application of corporate social responsibility brings numerous challenges. The decision whether to implement corporate social responsibility is certainly among the most significant challenges, because in the short term, this type of business conduct most often represents an expense, and it may seem that it would be more profitable and useful for the company to focus its time, effort and energy on the main goal of the business. Corporate social responsibility is certainly a very complex and sensitive topic, because it requires focusing not only on the social problem, but also on the impact of CSR on the business objectives, shareholders and stakeholders, and it is very often difficult to measure its contribution at the beginning.

2. CSR and signing of code of ethics in Croatia – statistical overview

Related to positive trends of accepting the concept of corporate social responsibility and signing a code of business ethics, it is interesting to display data that will show these trends with a certain degree of accuracy. According to data from 2013, there were 144,356³ active business entities in the Republic of Croatia, of which 712⁴ have signed a code of business ethics. At the end of 2015, there

were 185,297 active business entities, while the number of signatories of a code of business ethics was 1,026⁵. Given the above data, it can be seen that the number of signatories of a code of business ethics in relation to the number of active business entities has increased in the observed years, but not significantly, suggesting weak activity of acceptance and practice of CSR as a strategy among business entities in the Republic of Croatia. The mentioned weak, but still positive growth trend is clearly shown in Figure 1.

Figure 1 Share of signatories of a code of ethics in relation to the total number of active business entities in 2015



Source: Authors' compilation

Precise data about implementation of corporate social responsibility in the economic system of the Republic of Croatia unfortunately do not exist, but it is safe to say that the awareness of this issue in the business world has risen significantly. Srblić (2012) states that today in Croatia there are many activities indicating successful application, which would enable this business concept to truly become a reality, but the main and biggest problem is the lack of tailored and structured reports, which would include the above activities, as well as the lack of appropriate measures that would encourage corporate social responsibility. Furthermore, the same author states that for a more effective development of CSR in Croatia, it would be necessary to “focus on raising awareness of CSR, conduct education about building partner-

ships for all sectors, improve coordination among business organisations in creating a platform for the exchange of best practices of social responsibility, and, most importantly, provide a supportive environment for this form of business conduct, as well as all the technical assistance for its implementation.” However, it should be noted that there already are certain activities that suggest that this concept is recognised and supported in the business world. One of the examples for this is the CSR Index award for socially responsible companies, which is granted in the Republic of Croatia in the category of small, medium and large companies. The award is granted by the Croatian Chamber of Economy and the Croatian Business Council for Sustainable Development taking into account the following company characteristics: economic sus-

tainability, inclusion of corporate social responsibility in business strategy, working environment, environmental protection, market relations and relations with the community.

According to the research regarding CSR in Croatia carried out by UNDP in 2007 around 200 Croatian companies applied at least some form of CSR practices in one of the key areas (environmental protection, labour rights, community development, strategic or value orientation). However, this number has been significantly decreasing according to the latest relevant research of CSR in Croatia conducted as the analysis of the results of the CSR Index, which was drawn on five years of data collection, based on company participation in the CSR Index. This analysis showed that there is a lower interest among companies for CSR practice (98 participants in 2010 and 78 participants in 2012). The reason of such stagnation lies in the lack of outside pressure, lack of customer interest and non-existing public policies for CSR promotion.⁶

2.1 Examples of good socially responsible practice in Croatia and the world

The concept of socially responsible companies today has a wide range of meanings, and for the majority of companies in the Republic of Croatia this area of activity is relatively new. There are many more European and global examples, given that the concept of social responsibility was implemented in operations of these companies much earlier than in companies in Croatia. Thus, depending on the duration and progress in the application of this type of concept in the business, socially responsible companies can be classified into three groups. The first group includes companies in which the dimension of social responsibility is systematically accepted and fully embedded into everyday practice, to the extent that this type of business conduct cannot be left out from a single sphere of activity of the company in question. The second group comprises companies that have recently introduced the concept of social responsibility, but have most often done so because of various external pressures on the company, i.e., activity, such as laws that oblige companies to perform a variety of actions based on these concepts. The third group are companies that have, by gradually questioning their own business model, reached the conclusion that strategic changes are necessary and therefore

the concept of social responsibility became a part of these companies' operations. Some of the most common projects of socially responsible companies are: employee volunteering in the form of accepting young employees for professional training in the company, protection of animals, sponsoring the community, usually in the form of various scholarships, supporting various projects in the local and wider community, charitable and humanitarian donations, and various other activities (Krkač, 2007: 382-383).

According to the latest survey of the Ethisphere Institute, which is considered the global leader in defining and improving the standards of business ethics, customer satisfaction and business success, 131 companies from 21 countries and 5 continents were proclaimed the most ethical companies of 2016⁷. These companies are representatives of 45 different industries, from the banking sector to technology, food, construction and cosmetics industry. It is interesting to mention some of them, such as the National Australia Bank, L'Oreal, Tata Steel Limited, Illycafe S.p.A., etc. The criteria according to which the above institute selects the most ethical companies are complex, and they consist of an appraisal of the company's involvement in social projects of the local and wider community, especially taking into account the awareness of the need to preserve the environment, evaluation of the level of application of ethical standards and norms among employees of an individual company, but also an assessment of compliance with ethical standards in the market in relationship toward stakeholders.

3. Methodology

This paper sought to define the notions related to corporate social responsibility (CSR), ethics and code of ethics, analyse the application of CSR in Croatian companies and benefits for companies that implement CSR into their operations, as well as the challenges they face in doing so. An online questionnaire was used to analyse the current situation in two sectors, private and social (public) and thus provides an answer to questions how Croatian companies perceive corporate social responsibility, and if there is a link between corporate social performance of the company and signing the Code of business ethics. The questions were focused on the level of understanding and acceptance of CSR, ac-

cording to different population groups with respect to age, gender, level of education, personal and social responsibility, and culture. Questionnaires were sent to 100 companies, after which all the managers of all companies were called by telephone and asked to fill out the questionnaires. The method of primary data collection on a sample of 95 respondents was used for the purposes of the paper. The randomness of selection was ensured by choosing the public and private sector based on the directory of municipalities and cities, schools and scientific institutions, and business entities within the Croatian Chamber of Economy. The questionnaire was created by authors themselves and was processed using statistical methods of the SPSS-Statistical Package for the Social Sciences. The sample of respondents is composed of employees in the state sector, private sector, and in public-private companies, in which both the state and small shareholders have an ownership share.

The research was conducted using an online anonymous survey that consisted of 17 questions related to knowledge and application of the concept of corporate social responsibility and code of ethics in companies. Of the total number of respondents, 46.32% were male, while 53.68% were female. The youngest respondent was 23 years old, while the oldest respondent was 63 years old. The major-

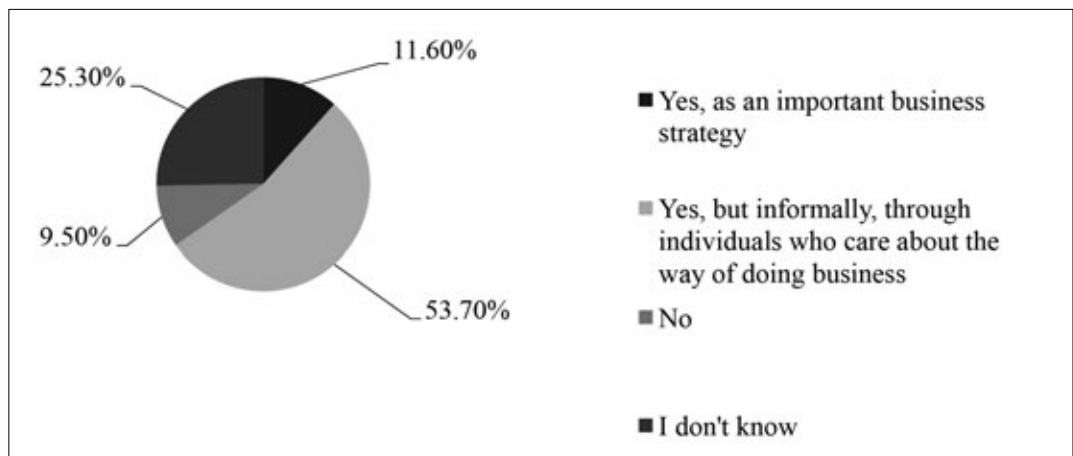
ity of the respondents, 31.58%, belong to the 51-63 age group. Given the level of education, the largest number of respondents, 86.3%, are highly educated.

According to the type of sector in which the respondents are employed, 69.50% are employed in the private, while 30.50% of respondents are employed in the public sector. Respondents were also divided into groups depending on whether they belong to a micro, small, medium or large enterprise. The majority of respondents, 32.60% of them, are employed in micro enterprises, an equal percentage of respondents, 18.90%, are employed in small enterprises and medium-sized enterprises, while 29.50% are employed in large enterprises⁸.

4. Application of corporate social responsibility in Croatian companies

The majority of respondents are familiar with the concept of CSR, and with regard to the level of education, this concept is more recognised by people with a higher level of education. However, despite recognising the concept, 25.30% of respondents cannot assess whether the concept is being applied, while 53.70% believe that their company applies the concept of corporate social responsibility only informally (Figure 2).

Figure 2 According to your opinion, is CSR implemented in your company?



Source: Authors' compilation

Most companies usually operate in a socially responsible manner in the areas of working environ-

ment and environmental protection, and the least in market relations (Table 1).

Table 1 Areas of implementation of CSR according to respondents' opinion

Area of implementation of CSR	Number of responses (N)	Percentage (%)
Economic sustainability	25	11.96%
Business strategy	29	13.88%
Working environment	40	19.14%
Environmental protection	38	18.18%
Market relations	25	11.96%
Relations with the community	34	16.27%
Other areas	18	8.61%
Total number of responses	209	100.00 %

Source: Authors' compilation

Although more than half of respondents believe that CSR has a positive effect on the company, 35.79% believe that CSR is tied exclusively to the image of the corporation, 24.21% believe that CSR has an impact on market positioning, while 12.63% believe that the application of this concept in company's operations has absolutely no effect on business performance.

58.90% of companies apply a code of ethics in their operations. The largest number of respondents (60%) believe that the most important role of a code of ethics is informing employees about the criteria of professional conduct, while 13.68% of respondents believe that the main objective is informing the public on what kind of behaviour is expected of members of a particular company. A somewhat smaller number of respondents (11.58%) see enabling protection of clients from unfair business practices as the most important objective of the application of a code of ethics in companies, and 3.16% think that the most important objective of application of a code of ethics within a company is enabling the protection of competing companies from unethical business practices.

Economic, political and social situation in the Republic of Croatia can be clearly read from the question whether companies in the Republic of Croatia operate in an ethical and socially responsible manner. Only 6.32% of respondents answered this question affirmatively, while other respondents believe that making profits is the main objective of most companies, where all means are used to achieve that goal. Most respondents blame the lack of a legislative framework for this state of the Croatian economy, which would make it mandatory for all companies to introduce a code of ethics, moni-

tor its application and introduce stricter sanctions aimed at preventing inappropriate types of behaviour. However, besides legislation, respondents believe that the education system also must undergo change, and that introducing courses related to business ethics and corporate social responsibility at the secondary and university levels would certainly not only increase the awareness of these concepts but also the application of this, both for the company and society, important way of doing business. The so-called "Balkan mentality", which was mentioned by a significant number of respondents, continues to focus on quick profits and profitability, whereas formal education of young people and internal training of employees can strengthen the awareness of individuals about the importance of creating such a business strategy that will integrate the needs and requirements of all the (internal and external) company stakeholders. Respondents are also of the opinion that work needs to be done to fundamentally change the system of social values and educate young people in the spirit of ethical and socially responsible living, because this will certainly affect their personal attitude towards business, regardless of the type of activity.

5. Concluding remarks

This paper attempted to provide insight into general notions related to the concepts of corporate social responsibility and business ethics, which is today often the main topic of conversation in the economic, but also in the wider circles, as well as into development thereof in Croatia and the world in the last dozen or more years. This mode of operation is becoming an increasingly important sub-

ject of debates, since the concept of making a profit without integrating care for natural resources, the environment, and the internal and external stakeholders jeopardizes the quality of life for all future generations. Croatia, as one of the least developed and poorest European countries, is faced with a rather long journey of adoption and actual application of the concept of corporate social responsibility and business ethics. Changing the mentality, that still relies on compromising moral norms and values in order to satisfy own private interests requires a change both in the educational sense and in the behaviour of active participants in the economy, in line with the value systems aimed at the welfare of man. Corporate social responsibility assumes that companies, in addition to creation of economic value, must take into account the consequences of all business activities and decisions on the society, community and key stakeholders. Although, especially in the short term, corporate social responsibility can bring more costs (additional investment, for example, in environmental protection or the quality assurance system), encouraging business behaviour based on moral values brings progress to the company in financial and in social terms in the long term. Making unethical decisions and lack of ethical behaviour of business people contribute to the decline of morality of the entire society, and therefore the educational system certainly has a significant impact, as well as the environment, which should not tolerate ethically improper practices. As seen in other previous research as well, Croatian

companies (both private and public) declare their commitment to CSR but it is more an approach based on individual initiatives and voluntary work and less a true business strategy. Although signing the Code of Ethics is not mandatory for Croatian companies, more than half of them apply their own code of ethics in their operations. However, it is mainly in order to avoid or punish bad employee conduct, and less as a business strategy that focuses on the needs of all of the stakeholders. Corporate social responsibility practices depend solely on the vision of the company and they do not have much to do with whether the company has signed the Code of Ethics or not. However, the number of socially responsible companies in Croatia is considerably lower than the number of companies whose primary goal is to generate profit, regardless of the means.

The need for further research to a significant extent lies in the area of connection between the educational system and the projection of the basic values of the civil society in the economic system. In addition, a comparative analysis of socially responsible European companies is required, as well as analysis of legislative frameworks that transparently reward this concept of doing business, but also warn about / penalise unethical decision-making. In addition, the media and the civil society can have a crucial importance in promoting the integration of environmental and social aspects in the core business activity of companies, but their influence in the Republic of Croatia is still insufficiently explored.

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*Julia Perić
Borna Turalija*

DRUŠTVENO ODGOVORNO POSLOVANJE KAO VAŽAN ČIMBENIK USPJEŠNOG POSLOVANJA U HRVATSKIM PODUZEĆIMA

SAŽETAK

Društveno odgovorno poslovanje (DOP) postaje sve značajniji predmet rasprave u javnosti jer primjenjivane ovoga koncepta ne utječe samo na poslovanje poduzeća, nego i na užu i širu zajednicu u kojoj to poduzeće posluje. Republika Hrvatska je primjer svakodnevnog razotkrivanja političkih i gospodarskih afera te se postavlja pitanje koliko su zajednica i društvo uistinu informirani o djelatnostima mnogih poduzeća te postoje li pisani ili nepisani zakoni i pravila koji se brinu o zastupljenosti morala u svakodnevnom poslovanju. Svrha ovoga rada je istražiti učestalost primjene koncepta društvene odgovornosti poduzeća i etičkog kodeksa u javnim i privatnim tvrtkama u Republici Hrvatskoj i njihov učinak. Rad pokušava odgovoriti na dva istraživačka pitanja: a) kako hrvatske tvrtke percipiraju društveno odgovorno poslovanje i b) postoji li veza između društveno odgovornog poslovanja poduzeća i potpisivanja službenog Etičkog kodeksa. Empirijski dio rada zasnovan je na anonimnoj anketi provedenoj na 95 ispitanika, zaposlenih u različitim poduzećima. Ispitani su sljedeći parametri: sociodemografske karakteristike ispitanika, upoznatost s konceptom DOP-a, primjena u poduzećima, godina uvođenja u poduzeće, područja primjene te učinak koji primjena društveno odgovornog poslovanja ima na poduzeće. Nadalje, ispitana je razina zastupljenosti etičkog kodeksa te njegova dostupnost i uspješnost u sprječavanju neetičnog ponašanja u poduzećima. Primjena DOP-a i etičkog poslovanja u Republici Hrvatskoj u porastu je u posljednjih desetak godina, ali su potrebne detaljne promjene obrazovnog, ekonomskog i političkog sustava kako bi implementacija bila u potpunosti uspješna.

Ključne riječi: društveno odgovorno poslovanje, hrvatska poduzeća, poslovna etika

Ivana Pavlič

University of Dubrovnik
Department of Economics
and Business Economics
Lapadska obala 7,
20000 Dubrovnik, Croatia
ipavlic@unidu.hr
Phone: +38520445923

Barbara Puh

University of Dubrovnik
Department of Economics
and Business Economics
Lapadska obala 7,
20000 Dubrovnik, Croatia
barbara.puh@unidu.hr
Phone: +38520445923

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Katija Vojvodić

University of Dubrovnik
Department of Economics
and Business Economics
Lapadska obala 7,
20000 Dubrovnik, Croatia
katija.vojvodic@unidu.hr
Phone: +38520445935

SEGMENTING THE BABY BOOMER GENERATION: AN EXAMPLE OF CROATIAN CONSUMERS

ABSTRACT

In today's world, demographic ageing has become a global phenomenon that emphasizes the need for researching older consumers' retail purchasing patterns and behaviour. Previous research failed to address this demographic segment in the context of the retail environment in Croatia. With this in mind, the present paper focuses on Croatian Baby Boomers in order to examine their level of satisfaction and loyalty to retail stores. The main purpose of this paper is to broaden current knowledge of Baby Boomers' retail store attitudes and retail behaviour in order to identify distinct categories of this ageing segment. Therefore, empirical research was conducted from 1 June to 1 October 2016 using a purposive sample of 169 Baby Boomers. In order to achieve the main aim of this paper, cluster analysis, ANOVA and the t-test were used. The results reveal that Croatian Baby Boomers can be segmented into three main clusters, each with their specific characteristics. This research has given rise to many questions in need of further examination of this growing segment in order to better understand their behaviour.

Keywords: Baby Boomer Generation, retail store attributes, buying behaviour, Croatian consumers

1. Introduction

Demographic ageing is a global phenomenon with ever-increasing relevance affecting the retail industry, particularly the food retail sector. In that

sense, age increases older consumers' retail buying and food-related behaviour changes (Meneely et al., 2009a). Traditionally, ageing consumers have been considered and treated as a rather homogeneous group (Kohijoki, Marjanen, 2013). However, numer-

ous scholars emphasize the heterogeneity of this broad age segment (Greco, 1987; Carrigan, 1998; Gunter, 1998; Mumel, Prodnik, 2005; Sudbury, Simcock, 2009; Moschis et al., 2011; Angell et al., 2014; Van der Zanden et al., 2014). Consequently, retailers are interested in knowing how this segment can be best served in the marketplace (Johnson-Hillery et al., 1997).

As stressed by Moschis et al. (2000), age groups must be understood for their specific needs and situations as consumers, and it is often emphasized that the elderly have special needs in the marketplace (Lumpkin, Hite, 1988). This is particularly true for Baby Boomers since there is little research on this aging segment. Although the precise boundaries of the Baby Boomer Generation are still being debated, it mainly refers to individuals born between the years 1946 and 1964 (Moschis et al., 2000; Worsley et al., 2011; Bava, 2015; Chapman, Ciment, 2015; Feeney, 2015; Russell, 2015).

Approaching the elderly consumer market properly is essential in meeting their needs and improving their shopping experience. More recent evidence (Parment, 2013) highlights that for Baby Boomers, the purchase process starts with a retailer the consumer trusts, who gives advice for choosing the right product. Therefore, it is crucial for retailers to develop a solid understanding of older consumers and to communicate with them. So far, retailers' understanding of the elderly consumers has received little attention. Although food retailers are interested in improving the food shopping experience of older consumers, their efforts are often not put into practice (Meneely et al., 2008).

Understanding elderly consumers' retail behaviour is important for retailers in order to improve their service and more effectively capture this growing market segment. The purpose of this study is to expand the knowledge base of Baby Boomers' retail store attitudes and retail behaviours in order to identify distinct categories of this ageing segment. To this end, the paper is organized into four sections. Following the introduction, the second section considers the bodies of literature associated with the shopping behaviour and the preferences of older consumers. The research methodology, data analysis and research results are presented in the third section. Following this, the fourth section

brings the research results. Finally, the paper closes with conclusions drawn from the paper.

2. Literature Review

Traditionally, older people have often been stigmatised with negative stereotypes regarding their physical and mental capacities (Gunter, 1998). However, more recent evidence (Thomas, Okleshen Peters, 2009) suggests that elderly consumers continue to remain physically and socially active. In addition, it has been shown that elderly consumers feel younger than their actual life age (Ying, Yao, 2010). However, Pak and Kambil (2006) affirm that there are psychological, social, economic and biological changes that affect their spending habits and priorities. In general, these consumers, on the average, spend more money at food stores than younger consumers (Moschis et al., 2004; Ong et al., 2008). As mentioned by Meneely et al. (2009a), a decline in patronage of multiple retailers is evident as age increases since elderly consumers tend to use local shops. In addition, they also appreciate the provision of additional facilities, e.g. a post office or chemist's (Meneely et al., 2009b).

When it comes to the food-shopping experience, Hare (2003) indicates key areas of dissatisfaction for elderly consumers, such as aspects of products for sale, retail practices and factors in the community that affect the shopping trip. Traditionally, many elderly consumers have been very reluctant to pursue their rights through the complaint process when they encounter problems with products or services (LaForge, 1989). In addition, as argued by Lee and Soberon-Ferrer (1999), ageing consumers were often described as a quiet majority who were less likely to report a dissatisfying experience. Nevertheless, elderly consumers are generally being more ethical than younger consumers (Vitell et al., 1991) and also less accepting of unethical sales tactics (Ramsey et al., 2007).

Baby Boomers are characterized by time poverty as they try to coordinate two careers and personal and family responsibilities (Hawkins, Mothersbaugh, 2010). The phenomenon of the "empty nest" is becoming the standard for this particular generation, a situation that is providing them with increased discretionary income on the one hand and time on the other. Although the segment of Baby Boomers is extremely diverse, some general characteristics

have been determined. This segment is characterised as having a blend of “me-generation” and old-fashioned family values as well as a strong influence on the values of other groups. Many people, who don’t belong to this generation feel as if they belong, feel affiliation (Paul, Olson, 2010).

As regards the shopping environment, Baby Boomers value the retail experience and in-store service (Parment, 2013). In that sense, the role of sales personnel is often emphasized (Oates et al., 1996; Hare et al., 2001). Elderly consumers identify friendly and helpful staff as positive factors associated with food shopping (Meneely et al., 2009b). Likewise, Lu and Seock (2008) argue that personal interaction is the strongest predictor of both elderly consumers’ satisfaction and overall loyalty behaviour. Consequently, creating a relationship with older consumers is of the utmost importance (Leventhal, 1997). Older consumers emphasise the importance of shopping as a means of socialisation and a leisure pursuit (Myers, Lumbers, 2008). Moreover, they see themselves as experienced, astute shoppers who seek quality and service. Furthermore, shopping can be seen as a way of reducing elderly consumers’ loneliness and enhancing social interaction (Kim et al., 2005; Pettigrew, 2007).

A number of in-store difficulties and challenges faced by elderly consumers can be identified in the retail store environment, e.g. store size and changing layout (Meneely et al., 2009b). In this sense, Pettigrew et al. (2005) identify the three issues of most concern to elderly supermarket shoppers which included the demeanour of supermarket employees, the functionality of the shopping environment (i.e. trolleys and baskets), and the appropriate placement of products on supermarket shelves. Likewise, Yin et al. (2013) stress the problem of understanding where certain products are placed on shelves and why. In addition, they determine other areas of concern, such as shelf height, poor signage, labelling and inappropriate portion sizes. Similarly, Sudbury-Riley (2014) points out both physical and psychological problems with product packaging. In their study of the elderly consumers, Moye and Giddings (2002) reported that they would not return to and would avoid looking around in retail stores without chairs or benches or with inappropriate product placement on retail shelves.

As regards retail store lighting and the influence of the colour of light on readability and overall colour

perception, elderly consumers reported difficulties with warmer lighting when value contrasts were reduced (Park, Farr, 2007). As regards brand loyalty, recent evidence suggests that elderly consumers tend to be more brand loyal (East et al., 2014) and remain attached for a longer duration to the same preferred brand (Lambert-Pandraud, Laurent, 2010). In addition, these consumers are not only more likely to repurchase but also actively resist switching brands once they have established a favourite brand (Karani, Fraccastoro, 2010). Consequently, Singh et al. (2012) outline that brand choice behaviour of elderly customers becomes an increasingly important issue for marketers.

When considering innovation resistance among mature consumers, Laukkanen et al. (2007) state that ageing appears to be related especially to the risk and image barriers. In terms of risk aversion, Reisenwitz et al. (2007) argue that seniors with more online experience report a lower level of risk aversion to the Internet than other mature consumers. As regards the fast pace of technology advancement, it is also important to consider elderly consumers and their behaviour. Although the use of information technology can improve the quality of life for the elderly, Hough and Kobylanski (2009) report that many older consumers choose to limit their interactions with information technology and so may be denied its potential benefits for enhancing quality of life. Further, Iyer and Eastman (2006) emphasize that senior citizens who have a more positive attitude about the Internet are more likely to use the Internet, to buy online, and to use the Internet for comparison shopping than those seniors with a less positive attitude toward the Internet. Within this framework, recent findings by Jiunn-Woei and Yen (2014) indicate that the major barriers toward online shopping include value, risk, and tradition.

Based on a review of empirical studies, it can be observed that continued research on the current topic is needed to better understand older consumers’ retail behaviour and their food shopping experience. In particular, this refers to Baby Boomers’ retail store attitudes and retail behaviours.

3. Methodology and Data Analysis

In this paper, we follow the abovementioned definitions of the Baby Boomer Generation focusing on

members born between 1946 and 1964. To achieve the main aim of the paper, empirical research was carried out using a convenience sample of 300 Croatian Baby Boomers from the Dubrovnik-Neretva County. The research was conducted from June 1 to October 1 2016. Of the initial sample, 169 questionnaires were correctly completed. The sample profile is summarized in Table 1.

Data were collected through a consumer questionnaire consisting of structured questions based on the literature review and previous research in the field (Mihčić, 2006; Mihčić, Kursan, 2010). The questionnaire consisted of four parts. The first part focused on five dimensions that looked at the satisfaction of Baby Boomers in a retail store context. Those value-based dimensions included retail service quality, retail store quality, product assortment, price and additional services. Each dimension was composed of several items that described attributes of customer satisfaction in more detail. In total 38 elements were categorized into five relevant dimensions. The questionnaire included multiple choice questions using a five-point Likert scale (1=very dissatisfied, 5=very satisfied), where respondents expressed their level of satisfaction. The second part of the questionnaire analysed the level of Baby Boomers' loyalty in a retail store environment and included eight items (1=completely disagree; 5=strongly agree). The third part of the questionnaire consisted of particular purchasing patterns – behavioural information: sources of information (four items - local newspapers, radio, TV, the Internet), the most visited retail store format (three items - local convenience store, supermarket, and hypermarket), frequency of purchases (three items - daily, weekly, once in two weeks), and monthly consumption (open question). The last part concentrated on demographic information such as gender, age, level of education, occupation, personal monthly income level and geographic information - place of residence (town or suburbs). As can be noticed, in addition to demographic variables, geographic and behavioural variables were also included. Taking into consideration all the variables included in the questionnaire, hybrid segmentation was applied.

Based on the literature review and purpose of this research, the following hypotheses were tested:

H1. There are significant differences in the level of satisfaction and retail store loyalty among Baby Boomers in Croatia.

H2. In addition to demographic features, behavioural features have a significant impact on Baby Boomers' level of satisfaction with retail stores in Croatia.

For the purpose of the research, a number of statistical procedures were carried out using the Statistical Package for the Social Sciences (SPSS, version 20.0). In order to segment Baby Boomers according to their overall satisfaction of retail services, cluster analysis was chosen. It is a segmentation technique that minimizes the distance between members of each cluster but maximizes the distance between the cluster centres (Weaver, Lawton, 2001: 445). Its importance lies in a fact that it offers explicit evidence that the respondents and their opinions are not homogeneous (Aguiló, Rosello, 2005: 931). K-means cluster analysis was used for segments identification due to the sample size. In this type of cluster analysis the number of clusters is chosen by the researcher. It has been demonstrated that K-means clustering methodology can be applied for the elderly market segmentation to achieve the appropriate forecasting and planning decisions (Wang et al., 2010).

To test validity of the data, the Kaiser-Meyer-Olkin test (KMO) of sampling adequacy was used. Further, Cronbach's alpha coefficient was calculated to test the reliability of the scale. First, univariate statistics were calculated for all questionnaire items (Table 2). Second, to divide residents into segments, K-means cluster analysis was carried out where two, three and four segment solutions were obtained. Since the three segment solution described data variability the best, it was chosen. Third, once clusters were identified, key socio-demographic characteristics were examined using ANOVA and t-test.

4. Results

Table 1 summarizes the profile of the respondents. As regards gender structure, approximately 70% of the respondents were female. Considering the age groups, three-quarters of the respondents belong to the age group from 50 to 64 years.

Table 1 Respondents' profile

Demographic characteristics	Frequency	Percentage (%)
Age		
50-64	127	75.1
65 and over	42	24.9
Gender		
Male	52	30.8
Female	117	69.2
Education		
Primary school or less	11	6.5
High school	102	60.3
Bachelor's degree	36	21.3
Graduate degree	16	9.5
Postgraduate	4	2.4
Occupation		
Public sector	21	12.4
Private sector	45	26.6
Private businessperson	8	4.7
Housekeeper	25	14.8
Retired	70	41.5
Monthly income in HRK ¹		
under 3,000	42	24.9
3,001-4,000	33	19.5
4,001-6,000	62	36.7
6,001-8,000	20	11.8
8,001-10,000	7	4.1
10,001-	5	3.0

Source: Authors' research

The education structure showed that the majority of respondents (60%) completed high school, whilst one-third were highly educated. In addition, just

under 60% of those surveyed were employed. For approximately 80% of the respondents, monthly income was under 6,001 HRK.

Table 2 Overall responses of Baby Boomers' satisfaction and retail store loyalty

	1	2	3	4	5	Mean	Std. Deviation
	%	%	%	%	%		
RETAIL SERVICE QUALITY							
Courtesy of store personnel			33.7	56.8	9.5	3.61	.54
Helpfulness of store personnel		3.0	32.0	56.2	8.9	3.57	.579
Sincerity of store personnel		3.0	50.9	39.1	7.1	3.4	.623
Education of store personnel			100.0			3.45	.576
Tidiness		1.2	24.9	52.7	21.3	3.8	.637
Efficiency of store personnel		7.1	33.7	52.1	7.1	3.5	.654
Promptness at the cash registers	1.8	13.0	45.0	38.5	1.8	3.19	.778

	1	2	3	4	5	Mean	Std. Deviation
	%	%	%	%	%		
RETAIL STORE QUALITY							
Store layout	2.4	2.4	32.5	51.5	11.2	3.48	.802
Cleanliness of store		2.4	23.1	57.4	17.2	3.75	.687
Store location		0.6	25.4	65.1	8.9	3.66	.532
Number of stores	0.6	0.6	31.4	62.7	4.7	3.51	.541
Store hours	4.1	1.2	29.0	52.1	13.6	3.57	.815
Parking facilities		6.5	66.9	23.7	3.0	3.18	.624
Store exterior appearance		4.1	63.9	28.4	3.6	3.25	.565
In-store attractiveness		6.5	68.0	17.2	8.3	3.25	.596
In-store atmosphere		1.8	43.2	51.5	3.6	3.49	.534
Scent		12.4	54.4	26.6	6.5	3.24	.748
In-store aisle width		2.4	43.6	41.3	12.7	3.75	.455
In-store ease of navigation	2.4	5.3	21.9	59.2	11.2	3.62	.653
Cash register organization		5.9	42.0	46.2	5.9	3.4	.676
PRODUCT ASSORTMENT							
Assortment		2.4	33.1	60.9	3.6	3.56	.601
Product quality		1.8	23.1	66.3	8.9	3.63	.555
Placement of products on shelves		3.6	42.0	50.3	4.1	3.5	.566
Selection of local products		9.5	48.5	32.5	9.5	3.34	.716
Selection of retail store brands		5.9	32.5	58.0	3.6	3.46	.598
Selection of bread and gourmet products	2.4	3.0	31.4	53.3	10.1	3.5	.741
Selection of fresh fruit and vegetables	0.6	0.6	45.0	41.4	12.4	3.46	.652
Selection of health products	3.2	10.6	41.4	38.9	5.9	3.06	.564
Selection of fresh meat		3.6	57.4	32.5	6.5	3.27	.641
PRICE							
Price level	3.0	18.3	52.7	19.5	6.5	3.02	.872
Signage/readability	0.6	8.9	52.7	34.3	3.6	3.16	.699
Price credibility		0.6	36.1	53.8	9.5	3.72	.636
Frequency of price promotions		5.3	32.0	54.4	8.3	3.66	.708
Quality of product promotion		8.4	43.4	38.7	9.5	3.33	.571
Value offered equal to price charged	0.6	9.5	37.9	47.3	4.7	3.46	.664
Overall level of satisfaction		9.7	47.6	36.4	6.3	3.56	.586
ADDITIONAL SERVICES							
Bill payment	1.8	4.1	30.8	44.4	18.9	3.75	.756
Home delivery	4.7	10.7	37.9	39.1	7.7	3.31	.873
LOYALTY							
I prefer to buy in this retail store		1.8	26.6	56.8	14.8	3.85	.791
I am a member of the customer loyalty programme		0.6	29.6	59.8	10.1	3.79	.681
I am satisfied with benefits of loyalty programme	3.6	0.6	33.7	61.5	4.1	3.69	.616
I am satisfied with types and frequency of rewards			32.5	54.4	9.5	3.66	.793
I feel comfortable buying in this store	0.8	7.7	48.5	36.4	6.6	3.87	.482
Store atmosphere evokes positive emotions		3.4	53.6	40.4	2.6	3.64	.527
I will recommend the store		2.4	40.8	50.9	5.9	3.8	.681
The store has a positive image	2.1	6.7	43.5	38.9	8.8	3.76	.522

*Percentages (rows) are not always 100 % in total due to rounding

** Less than 1%

Source: Authors' research

Table 2 presents the results in relation to the responses to 38 attitudinal statements associated with the level of satisfaction and eight attitudinal statements relating to the level of retail store loyalty. The Kaiser-Meyer-Olkin measure of sampling adequacy

was 0.658, indicating that the number of variables and sample size was appropriate. The value of Cronbach's alpha coefficient was 0.890 suggesting satisfactory internal consistency and reliability of the scale.

Table 3 Mean scores of clusters according to Baby Boomers' level of satisfaction and retail store loyalty and ANOVA

	Cluster 1	Cluster 2	Cluster 3	F ratio*
RETAIL SERVICE QUALITY				
Courtesy of store personnel	3.30	3.87	3.61	15.916
Helpfulness of store personnel	3.63	3.92	3.40	16.336
Sincerity of store personnel	3.09	3.53	3.50	8.012
Education of store personnel	3.30	3.60	3.43	3.500
Tidiness	3.61	4.05	3.73	6.806
Efficiency of store personnel	3.30	3.85	3.37	12.915
Promptness at the cash registers	2.39	3.48	3.47	50.185
RETAIL STORE QUALITY				
Store layout	2.84	4.06	3.45	41.312
Cleanliness of store	3.14	4.06	3.91	34.782
Store location	3.36	4.07	3.53	34.584
Number of stores	3.39	3.78	3.40	10.597
Store hours	3.68	4.10	3.10	32.369
Parking facilities	2.83	3.73	3.00	47.085
Store exterior appearance	2.83	3.64	3.22	34.556
In-store attractiveness	2.92	3.68	3.12	30.256
In-store atmosphere	3.31	3.77	3.39	12.510
Scent	2.90	3.84	3.62	22.479
In-store ease of navigation	2.67	3.74	3.22	34.035
Cash register organization	3.00	4.10	3.64	32.227
PRODUCT ASSORTMENT				
Assortment	2.81	3.76	3.49	35.348
Product quality	3.07	3.95	3.59	32.884
Placement of products on shelves	3.22	3.91	3.49	27.682
Selection of local products	3.11	3.82	3.65	23.471
Selection of store brands	2.82	3.62	3.45	20.673
Selection of bread and gourmet products	3.16	3.57	3.58	8.457
Selection of fresh fruit and vegetables	3.14	3.72	3.57	8.629
Selection of fresh meat	3.08	3.67	3.53	12.052
PRICE				
Price level	3.02	3.79	3.18	26.662
Signage/readability	2.24	3.41	3.20	34.330
Price credibility	2.74	3.28	3.33	12.415
Frequency of price promotions	3.45	4.02	3.75	6.583
Value offered equal to price charged	3.64	3.91	3.40	13.297

	Cluster 1	Cluster 2	Cluster 3	F ratio*
ADDITIONAL SERVICES				
Bill payment	3.27	3.60	3.47	2.355
Home delivery	3.64	3.87	3.72	2.371
LOYALTY				
I prefer to buy in this retail store	3.25	3.55	3.18	12.548
I am a member of the customer loyalty programme	3.45	4.09	3.90	29.531
I am satisfied with benefits of loyalty programme	3.61	4.15	3.64	27.881
I am satisfied with types and frequency of rewards	3.64	4.02	3.62	36.135
I will recommend the store	2.82	4.06	3.19	25.192

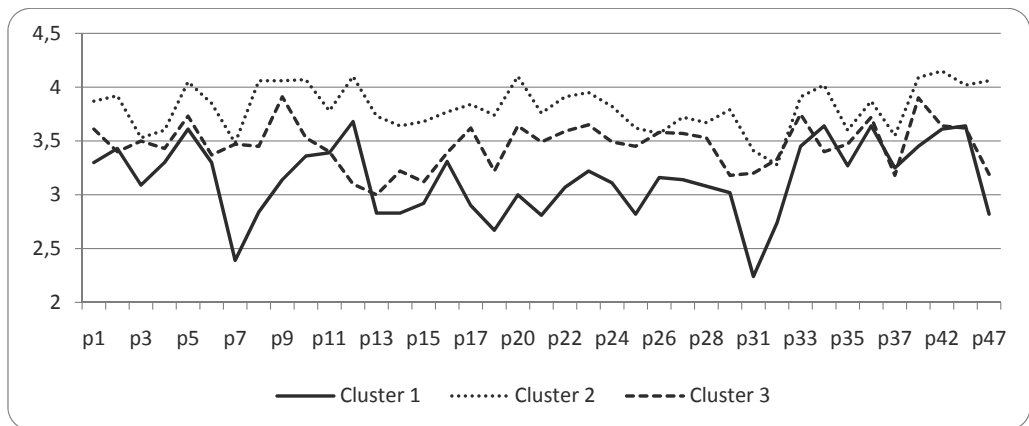
* $p < 0.01$

Source: Authors' research

In addition, it should be noted that statements with a statistical significance higher than 0.01 were excluded from further analysis. These statements included five questions associated with customer satisfaction (*in-store aisle width, selection of health products, quality of product promo-*

tion, feeling valued and appreciated as a customer, and the overall level of satisfaction), and three questions relating to customer loyalty (*I feel comfortable buying in this store; The store atmosphere evokes positive emotions; The store has a positive image*).

Figure 1 Plot of means for each cluster



Source: Authors' research

According to Table 3 and Figure 1 it can be concluded that three different segments were isolated. The results indicate that differences of mean values among the segments are statistically significant indicating that hypothesis H1 is confirmed.

Broadly speaking, Croatian Baby Boomers express middle level of satisfaction toward retail stores (Fig-

ure 1). On the one hand, Cluster 1 includes Croatian Baby Boomers who have lower scores on satisfaction and loyalty statements towards retail stores. On the other hand, Baby Boomers belonging to Cluster 2 have opposing opinions compared with those in Cluster 1, whilst consumers belonging to Cluster 3 seem to be rather indifferent.

Table 4 ANOVA and t-test results for individual variables by segments

	Cluster 1 <i>Careful traditionalists</i>	Cluster 2 <i>Devoted modernists</i>	Cluster 3 <i>Cherry pickers</i>	P
Age	3.14	3.28	3.29	0.136
Gender	1.73	1.45	1.85	0.000
Education	2.20	2.62	2.38	0.046
Occupation	3.75	3.58	4.90	0.102
Personal monthly income	2.35	2.85	2.58	0.050
Place of residence	1.66	1.34	2.23	0.000
Sources of information	2.31	2.16	2.46	0.000
Monthly consumption	2.09	2.78	2.72	0.002
Retail format	2.14	1.79	1.61	0.000
Frequency of purchase	1.98	1.47	1.79	0.001

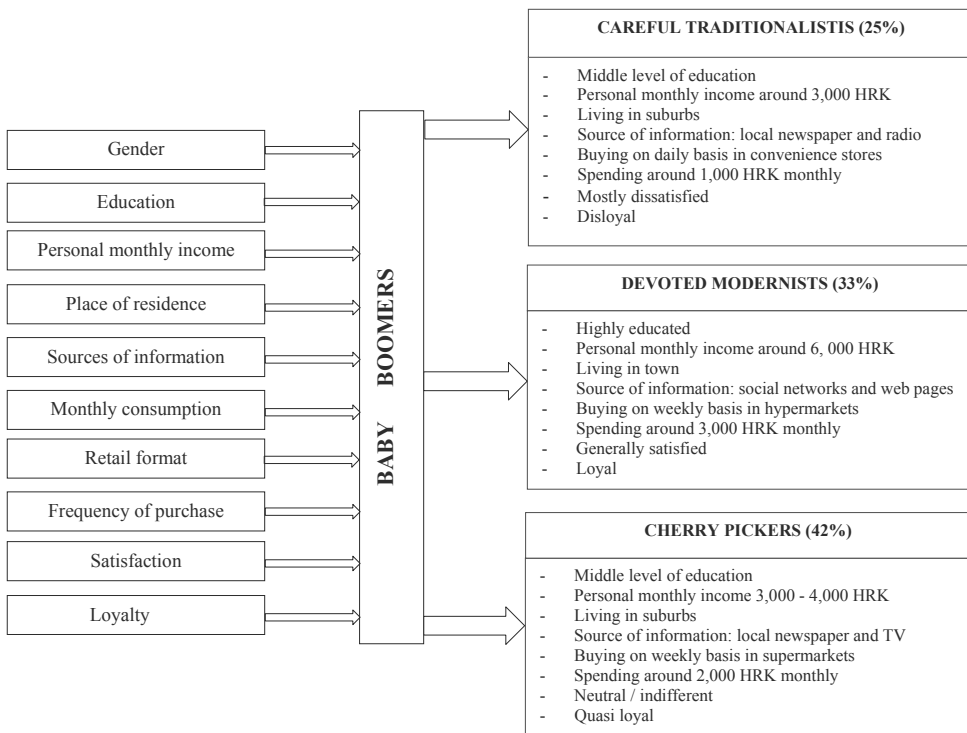
* $p < 0.1$

Source: Authors' research

As can be observed from Table 4, variables age and occupation are not statistically significant. Thus, they will be excluded from further analysis. Three

isolated segments are named as follows: *Careful traditionalists*, *Devoted modernists* and *Cherry pickers* (Figure 2).

Figure 2 Empirical model



Source: Authors' research

The first cluster, given the label *Careful traditionalists* and comprising one-fourth of the sample, is the smallest of the three clusters. These Baby Boomers are mostly women (72%), with middle levels of education (70%), personal monthly income around 3,000 HRK (52%), and living in suburbs (40%). They use local newspapers and radio as a source of information; buy on a daily basis in convenience stores and spend around 1,000 HRK a month. In general, these consumers are dissatisfied with the analysed retail store attributes. Specifically, they are dissatisfied with sincerity of store personnel, promptness at the cash registers, in-store ease of navigation, assortment, selection of store brands, and signage and readability. In light of this, they would not recommend the retail store and they do not prefer to buy there. However, they are satisfied with helpfulness of store personnel and tidiness, store hours, placement of products on shelves, value offered equal to price charged, and frequency of price promotions.

The second cluster entitled *Devoted modernists* includes just under one-third of the Baby Boomers, with the same percentage of male and female buyers; mostly highly educated (40%), with a personal monthly income around 6,000 HRK (52%) and living in town (69%). The members of this cluster use social networks and web pages as a source of information, buy mostly in supermarkets on a weekly basis and spend around 3,000 HRK a month. Generally, they are satisfied with the analysed store attributes. In particular, they are satisfied with tidiness, store hours, product quality, frequency of price promotions, and benefits of loyalty programme. Moreover, they are loyal consumers; they would recommend the retail store to others, and they are aware of the benefits from loyalty programmes. On the other hand, these consumers express dissatisfaction with promptness at the cash registers, store exterior appearance, selection of fresh meat, and signage and readability.

Finally, the third cluster, named *Cherry pickers* and comprising 42% of the sample, is the largest of the three clusters. Members of this group are mostly women (85%), living in suburbs (30%), with middle levels of education (66%), and a personal monthly income between 3,000 and 4,000 HRK (41%). Local newspapers and TV are their main sources of information gathering; they usually buy in supermarkets on a weekly basis and spend around 2,000 HRK a month. Broadly speaking, these consumers appear to be fairly neutral when compared to other segments. On the one hand, they are satisfied with

the courtesy of store personnel, cleanliness of store, selection of local products, and frequency of price promotions. Furthermore, they are also members of customer loyalty programmes. On the other hand, they are dissatisfied with the efficiency of store personnel, parking facilities, selection of store brands and price levels.

Apart from the demographic impact on elderly consumer behaviour, the findings suggest that behavioural impacts also have a significant influence on the Baby Boomers' level of satisfaction with retail stores. As a result, the second hypothesis (H2) can be confirmed.

5. Conclusion

Population ageing directly affects the retail industry, in particular the food retail sector. In that context, the market segmentation analysis focused on the Baby Boomer Generation provides a more sophisticated understanding of the elderly consumer market allowing retailers to target and position offerings specifically for selected elderly consumer groups (Moschis et al., 2005). Furthermore, segmentation of the elderly market enables better customer understanding, defining the most attractive elderly segments, efficient prioritising of services, appropriate positioning of products and market services both for the customer and against the competition, creating the personalised marketing campaigns, selecting the best performing distribution channels, winning competitive edges after customization of products and services, and creating value offers and making the most of market opportunities (Dibb, Simkin, 2010; Feldman, 2006).

To the best of our knowledge, this is the first study that deals with Croatian Baby Boomers with the aim to identify profiles of older consumers using behavioural, geographic and demographic variables. This paper has examined the specific segment of the consumer market by clustering the Baby Boomers into various market segments. Three clusters were profiled using behavioural, geographic and demographic variables: *Careful traditionalists*, *Devoted modernists* and *Cherry pickers*. In conclusion, several points have to be outlined. First, the research has stressed the heterogeneity of the older consumers' segment. This finding is consistent with previous studies (Sudbury, Simcock, 2009; Moschis et al., 2011; Angell et al., 2014; Van der Zanden et al., 2014) emphasizing heterogeneity within the older consumers' segment. Second, the paper developed

an older consumer typology taking into account their behavioural, geographic and demographic features. In light of this, the findings can be useful to both retailers and marketers in order to properly approach the elderly consumer market and to improve their shopping experience.

However, the findings should be considered in the light of their limitations. As anticipated, there were some problems due to the questionnaire length, implying more time to complete it. As the focus of the study was on older consumers, the questionnaire could have been a bit shorter. Thus, the questionnaire length should be treated with the utmost caution, in particular when examining ageing consumers. Further, given that purposive sampling was used, the results should be taken as indicative only. In regard to a sample selection, the research was conducted in one Croatian county, in the very south of Croatia, which possibly limits the representativeness of the sample and the generalisation of the findings. Finally, an additional limitation refers to the lack of prior research of Baby Boomers in Croatia. Consequently, it was not possible to compare the results with similar previous studies relating to older consumers in Croatia.

Starting from questionnaire design, future research should adjust better to older consumers. In other

words, one should take into account the distinctive features of older consumers. Therefore, instead of a questionnaire, further researches could apply different methods of interviewing, as well as other methods of data collection in qualitative research. The future research sample should be extended by including other Croatian counties and conducting the research over a longer period. In that way, certain similarities and differences of retail buying behaviour of older consumers in Croatia could be identified. Thus, in order to generalize the findings, future research should be focused on the respondent selection and should cover a wider geographic area of examination. In addition, further research should be undertaken in the area of elderly consumers and e-retailing. In that sense, the following aspects could be examined: older consumers' attitudes and intentions towards using the Internet, risk aversion, or innovation resistance among older consumers. Despite the limitations, the paper provides a framework for an improved understanding of older consumers and their food store experience. Moreover, it contributes to the existing literature by providing new insights into the level of satisfaction and loyalty of Croatian Baby Boomers. In addition, the research can be useful for future studies on this topic, in particular in the context of the Croatian retail environment.

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(ENDNOTES)

- 1 HRK stands for the Croatian Kuna. In January 2016 the exchange rate for EUR to HRK 7,515, available at: <https://www.hnb.hr/en/web/guest/core-functions/monetary-policy/exchange-rate-list/exchange-rate-list> (Accessed on: January 30, 2017)

Appendix I.*A part of the questionnaire*

Please mark the level of your satisfaction with given statements on the Likert scale 1-5 (1 is very dissatisfied and 5 is very satisfied)					
RETAIL SERVICE QUALITY					
Courtesy of store personnel	1	2	3	4	5
Helpfulness of store personnel	1	2	3	4	5
Sincerity of store personnel	1	2	3	4	5
Education of store personnel	1	2	3	4	5
Tidiness	1	2	3	4	5
Efficiency of store personnel	1	2	3	4	5
Promptness at the cash registers	1	2	3	4	5
RETAIL STORE QUALITY					
Store layout	1	2	3	4	5
Cleanliness of store	1	2	3	4	5
Store location	1	2	3	4	5
Number of stores	1	2	3	4	5
Store hours	1	2	3	4	5
Parking facilities	1	2	3	4	5
Store exterior appearance	1	2	3	4	5
In-store attractiveness	1	2	3	4	5
In-store atmosphere	1	2	3	4	5
Scent	1	2	3	4	5
In-store ease of navigation	1	2	3	4	5
Cash register organization	1	2	3	4	5
PRODUCT ASSORTMENT					
Assortment	1	2	3	4	5
Product quality	1	2	3	4	5
Placement of products on shelves	1	2	3	4	5
Selection of local products	1	2	3	4	5
Selection of store brands	1	2	3	4	5
Selection of bread and gourmet products	1	2	3	4	5
Selection of fresh fruit and vegetables	1	2	3	4	5
Selection of fresh meat	1	2	3	4	5

Please mark the level of your satisfaction with given statements on the Likert scale 1-5 (1 is very dissatisfied and 5 is very satisfied)					
PRICE					
Price level	1	2	3	4	5
Signage/readability	1	2	3	4	5
Price credibility	1	2	3	4	5
Frequency of price promotions	1	2	3	4	5
Value offered equal to price charged	1	2	3	4	5
ADDITIONAL SERVICES					
Bill payment	1	2	3	4	5
Home delivery	1	2	3	4	5
LOYALTY					
I prefer to buy in this retail store	1	2	3	4	5
I am a member of the customer loyalty programme	1	2	3	4	5
I am satisfied with benefits of loyalty programme	1	2	3	4	5
I am satisfied with types and frequency of rewards	1	2	3	4	5
I will recommend the store	1	2	3	4	5

Ivana Pavlić
Katija Vojvodić
Barbara Puh

SEGMENTIRANJE BABY BOOMER GENERACIJE: PRIMJER HRVATSKIH POTROŠAČA

SAŽETAK

Demografsko starenje danas postaje globalni fenomen koji naglašava potrebu istraživanja kupovnih obrazaca i ponašanja starijih potrošača. Prethodna istraživanja zanemarila su ovaj demografski segment u kontekstu hrvatskog maloprodajnog okruženja. S tim u vezi, rad se bavi generacijom hrvatskih *Baby Boomera* kako bi se istražila razina njihovog zadovoljstva i odanost prodavaonicama. Glavni je cilj rada proširiti postojeća znanja o maloprodajnim obilježjima i ponašanju ove generacijske skupine kako bi se identificirale njihove različite kategorije. Empirijsko istraživanje provedeno je od 1. lipnja do 1. listopada 2016. na prigodnom namjernom uzorku od 169 *Baby Boomera*. Klasterska analiza, ANOVA i t-test korištene su kako bi se postigao glavni cilj rada. Rezultati upućuju na to da se hrvatski *Baby Boomeri* mogu segmentirati u tri glavna klastera uzimajući u obzir njihove posebnosti. Istraživanje otvara brojna pitanja koja treba istražiti u kontekstu boljeg razumijevanja ponašanja ovog rastućeg segmenta potrošača.

Ključne riječi: *Baby Boomer* generacija, obilježja prodavaonica, kupovno ponašanje, hrvatski potrošači

Marinko Jurčević
University of Zagreb
Faculty of Transport
and Traffic Sciences
Vukelićeva ulica 4,
10000 Zagreb, Croatia
marinko.jurcevic@fpz.hr
Phone: +38512380230

Bia Mandžuka
University of Zagreb
Faculty of Transport
and Traffic Sciences
Vukelićeva ulica 4,
10000 Zagreb, Croatia
bia.mandzuka@fpz.hr
Phone: +38512380227

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Tomislav Bubalo
Planinska 33,
10360 Sesvete, Croatia
tomislav.bubalo@gmail.com

INFLUENCE OF COSTS ON THE OPTIMIZATION OF TRANSPORT ROUTES (CASE STUDY) – PASSENGER TRANSPORTATION COMPANY FROM ZAGREB

ABSTRACT

Small and medium-sized road transport companies located in Croatia are faced with strong competition on the transport and logistics market. The problem of cost management in road transport enterprises is one of the most crucial ones for their efficient functioning. Enterprises operating on the market are very different, so it is important to analyse their cost structure in relation to their organization. To improve the system and reduce transport costs, a multi-level full cost allocation model has been set up and is analysed in this paper. The authors give an overview of the research results on the costs structure of a road transport company from Zagreb and present their components and differences. The authors establish and present the differences in the cost structure and the impact of costs on the optimization of transport routes and logistics management.

Keywords: Costs, transportation, optimization, logistics

1. Introduction

With the development of globalization and information technology there has been significant development of logistics. The development itself increases the importance of transport logistics, whose task is the quality management and planning of physical processes of goods and passengers moving from the beginning to the end point on the transport network. The transport network has an important function in the transport logistics busi-

ness because it is transported between the starting and end points. This paper will analyse the optimization of the transport network, its costs and the ways it is used to maximize the efficiency of transport logistics. The first part of the paper involves defining the tasks of transport logistics as one of the primary problems in companies. Then the analysis of transport logistics of Croatia Bus Ltd. Zagreb will be carried out, which deals with the transport of passengers in internal and international traffic.

The Croatian transport market is mostly used by direct distribution, which shows the progress and the need to increase competitiveness. Also, direct distribution will be explained in more detail in order to better understand the need for a more quality transport network that would contribute to the achievement of the company's goals. The transport network and route planning are key items in all distribution companies. A well-planned route can contribute to the company's profitability, but also to its reduction if important cost parameters for certain transport routes have been overlooked. It is necessary to look at, and pay attention to, all parameters and possible costs when planning the transport network or its routes. Some of these parameters will be clarified and analysed in order to understand their importance. The focus of this paper is the proposal of optimization measures that will enable the creation of sustainable linear transport of people. Optimization measures will relate to technical, organizational and economic optimization. By applying these measures, the state of the linear passenger transport will change to a better one, which will result in greater capacity utilization of the buses offered by the carrier.

2. Analysis of costs in transport and planning transport routes

Company profitability greatly depends on logistics costs as they make up a significant part of the total operating costs. The share of logistical costs in the planning and realization of transport routes and distribution chains in the total costs differs from company to company and ranges from 15% to 25%. Logistics costs, on average, account for 8% of the company's total revenue, while some research shows that the structure of total logistics costs is: transport 45%, maintenance 25%, other costs 20% and administrative costs 10%, which does not have to be a rule for every business. A lot of these do not represent strategically important functions on which an organization's competitive advantage is founded, but are key to operational and profitable business operations. The costs for logistic functions are much more significant than in the manufacturing industry. Because of high costs, companies have begun to seek savings in developing their own logistics systems. Below will be mentioned some terms that affect the cost of transport logistics (Kolaković, 2005):

1. Economics - Development of logistics entities significantly reduces the need to retain their own logistics operations in transport companies. Based on volume economics, only the largest retailers on the market manage to reduce costs and compete at low prices. Due to small quantities and a large number of delivery points, it can be concluded that it is cheaper and simpler to find a reliable logistics partner who will provide a quality and complete logistics service.

2. Costs of lines - Most business entities in the calculation of logistics services do not count all costs of lines. Mainly fuel costs, tolls, and net payrolls are the most important items of transport, as well as all forms of vehicle maintenance. For example, depreciation of buses, registration, insurance, maintenance of transport equipment and direct transport costs (fuel, all travel costs, etc.).

3. Volume economies - Volume economies play a key role in achieving efficiency in logistics and ultimately the profitability of the company. Due to the large number of delivery points, a high number of vehicles is needed to ensure the quality and accuracy of the transport service. Usually, because of the large number of delivery destinations and the specific shape of Croatia, companies have a large number of vehicles, and low utilization. It is very easy to lose focus with the main goal being the creation of profitable logistics. For example, buses drive the passengers in one direction, return empty and insufficiently fill the route. Transport management includes management of delivery units, planning of incoming and outgoing embarkation, planning and optimization of embarkation and disembarkation, vehicle maintenance, worker/driver planning, and planning of required documentation, especially when it comes to international transport (Bukljaš et al., 2011).

Some examples of cost management include:

- Amortization of logistics infrastructure and supply chain, which includes office space, accessories and support (MOR - Maintenance, Repair and Operations),
- Logistics costs and supply chain management and planning of transport routes,
- Wages, including daily allowances for transport managers and transport workers,
- Specialized training and continuous learning activities.

2.1 Types of transport costs

Costs in companies represent a constant burden that they continually strive to minimize. The economies of volume result in better prices for users, namely better or lower prices resulting in higher demand. However, it is essential to sum up all the costs incurred when determining the sales price of the transport service. It is necessary to know the structure of the overall price so that it is possible to make decisions during negotiations with new and existing customers. Understanding the cost structure is necessary to calculate the cost of transport services and enable effective control as changes in the costs directly affect the profitability of the company (Šamanović, 1999).

There are various categories of costs that need to be considered:

1. Fixed costs

- Insurance of vehicles and goods
- Vehicle registration
- Vehicle maintenance costs
- Fixed salary
- Rental and energy costs
- Amortization of the means of transport

2. Variable costs

- Fuel costs
- Tires
- Lubricants
- Variable part of salary

3. Direct costs

- Tolls
- Tunnels
- Costs of the customs procedure
- Inspection costs.

Fixed costs are the costs that exist regardless of the movement of the vehicle. They are expressed by time, e.g. per hour or per day. Variable costs are the costs incurred when the vehicle is moving. They are expressed by distance (km). According to their characteristics direct costs also belong to variable costs that depend directly on the itinerary on which the vehicle is moving. The approach to pricing for a particular route can include price calculation for

the whole route or A-B-C-A, or price calculation for the A-B route. Below, the characteristics of both approaches will be explained in detail (Zelenika, Pupovac, 2008).

1. Calculation of the price for the whole route A-B-C-A - Based on real indicators for each leg within the entire route, it burdens all customers at real costs, and allows the possibility to compensate profitability between individual legs of transport to make the entire route profitable. Calculation is not always possible because at the moment the calculation is done, the routing officer does not know how to close the route. This is used for major key buyers and for routes to be repeated.

2. Calculation of the price for the A-B route - Based on the planned exploitation indicators, real kilometres are increased by 20% to ensure that the enterprise plan is realised by 83% of kilometres.

A faster and simpler calculation - The route will be profitable if the company has a utilization plan. In the total number of kilometres spent per bus and the share of empty kilometres, all customers are equally burdened with planned empty kilometres and scheduled time of waiting.

When planning the transport routes or meeting passenger needs, several key points need to be addressed when answering the request for a transport service:

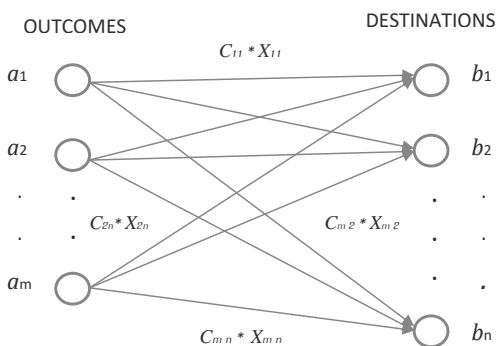
1. Define the route of the vehicle from the place of loading to the place of unloading
 - a) Increase kilometres by 20% relative to the required ratio
 - b) Provide the entire transport circuit (from garage to garage)
2. Define transit time
 - a) Estimate the vehicle's turnaround time (both for the required distance and for the entire transport circuit)
 - b) Consider the legal elements of mobile staff work
3. Include all costs on the transport route
 - a) Fuel prices – depending on the VAT in a particular country
 - b) Toll charges
 - c) Direct travel costs (FITO, Veterinary, Export Customs ...)

4. Enter the data in the calculation template
5. Compare the profits with the plan

3. Transport problem

By solving transport problems on the transport network, the optimal way of transporting between the larger supply centres and demand centres is obtained. The supply centre has its own capacity, and the centre of demand is the level of demand. The supply centre may, for example, be a specific distributor, and the demand centre may be the end-user, i.e. customer. Transport routes between these centres or nodes have different unit costs of transport, and by solving this problem, they want to choose the best quality solution for transport between nodes. In order to optimize the solution, the following two conditions must be met: the first requirement is that the demand within the network must be met, and the second requirement is to do so with minimum transport costs. When determining the optimal solution to a transport problem without application of software tools, the initial solution must first be found and then optimally determined. Methods such as the Northwest corner method, the least cost method, and Vogel's approximation method are used to determine the initial solution. Determining the optimal solution is carried out by applying a relative cost method or a stepping stone method (Carić, 2014).

Figure 1 Schematic representation of a transport problem



Source: Carić (2014)

Figure 1 shows the transport problem schema, transport between the different starting points

(*am*) and the destination (*bn*), where *Cij* denotes the unit cost from the starting point (*i*) to the destination (*j*) and *Xij* the transported quantity from the starting point (*i*) to the destination (*j*). In addition to the application in transport between the two transport nodes, the transport problem is applied in the case of multiple capacity locations. The multiple locations represent the problem of finding the most convenient locations for a larger number of different capacity centres that can be accommodated on a larger number of locations. As with transport between nodes, a solution is required that will give the least transport costs. The problem is solved by accommodating an appropriate transport problem for each possible combination of accommodation centres in a group of possible locations, ultimately making for each such combination an optimal transport solution for which the value of total transport costs is minimal. A comparison of optimal solutions of different combinations of accommodation centres to a group of possible locations provides the location that is most convenient with regard to transportation costs.

In order to write the shortest mathematical problem, it is first necessary to set up a network that is intended to send a certain quantity of goods from node 1 to node *m* at the lowest expense. $b_1 = 1, b_m = -1, b_i = 0$ for and $i \neq 1$ or m . Then the mathematical model reads:

Setting up a mathematical model:

- c_{ij} – cost of transporting from the starting point *i* to the destination *j*
- x_{ij} – the number of passengers to be transported from the starting point *i* to the destination *j*
- *k* – the shortest way (or route)

Function:

$$\min F = \sum_{i=1}^m \sum_{j=1}^m c_{ij} x_{ij} \quad (1)$$

Limitations:

$$\sum_{i=1}^m x_{ij} - \sum_{k=1}^m x_{ki} = 1 \quad \text{if } i = 1, 0 \text{ if } i \neq 1, \text{ or } m = -1, \text{ if it is } i = m \quad (2)$$

$$x_{ij} \geq 0, i, j = 1, \dots, m \quad (3)$$

The described model is elaborated in the case study for the transport company Croatia Bus Ltd., Zagreb. Given that the implementation of the central infor-

mation system and the exchange of essential traffic data among the operators creates a data base for processing, the purpose is to optimize its management of the fleet. Better utilization of vehicle capacity, reduced vehicle and driver organization time, and faster vehicle re-routing should lead to a significant reduction in the overall transport cost.

The allocation of indirect costs goes from the highest level to the lower levels of the calculation hierarchy. The calculation is finished as soon as all indirect costs have been allocated to the profit objects. Here, the performance-independent fixed indirect cost items are not included into the multi-level indirect cost allocation. So the costs of a cost centre can be divided into fixed and variable parts, and at the same time variable costs can be divided into assigned primary and allocated secondary parts (Kaukler, 2011):

$$C_t = C_{ft} + C_{vt} = C_{ft} + C_{vt(p)} + C_{vt(s)} \quad (4)$$

where:

- C_t – cost of cost centre (company)
- C_{ft} – fixed cost of cost centre
- C_{vt} – variable cost of cost centre
- $C_{vt(p)}$ – variable primary cost of cost centre
- $C_{vt(s)}$ – variable secondary cost of cost centre

The variable secondary cost is the sum of allocated variable cost items coming from the serving cost centres on the basis of relative performance consumption. So the cost of a cost centre can be calculated as follows:

$$C_t = C_{ft} + C_{vt(p)} + \sum_{i=1}^n \left(C_{vt(p)} \frac{P_{ki}}{P_i} \right) \quad (5)$$

where:

- $C_{vt(p)}$ – variable cost of service cost centre
- P_i – performance of service cost centre
- P_{ki} – performance consumption of cost centre

When using the traditional costing approach, the average fixed cost values and average cost values are elaborated at company level. The aggregate fixed cost of the company is averaged by time while the aggregate variable cost is averaged by transport performance. Having the generalised average cost values, the cost of a profit object can be calculated through multiplying these values by the time consumption and by the transport performance.

$$C_j = C_{j(d)} + \frac{T_j}{\sum_{j=1}^m T_j} \sum_{k=1}^n C_{ft} + \sum_{i=1}^n C_{vi} \frac{P_{ji}}{P_i} \quad (6)$$

where:

- P_{ji} – performance consumption on profit object
- T_j – duration or transport service time of profit object

$$C_j = \frac{C_{ft}}{\sum_{j=1}^m T_j} T_j + \frac{C_{vt}}{\sum_{j=1}^m D_j} D_j + C_{j(t)} \quad (7)$$

where:

- D_j – transport performance of profit object
- $C_{j(t)}$ – dedicated cost of profit object

4. Analysis of the transport network of Croatia Bus Ltd. Zagreb for the Region of Dalmatia

Croatia Bus Ltd., Zagreb is engaged in linear transportation of domestic and international passengers. The fleet consists of 64 buses of an average age of 11.3 years. The company has been investing continuously in the renovation and modernization of the fleet in recent years. Croatia Bus Ltd., in order to increase the quality and maintenance of the vehicles, has invested in the modernization of the state-of-the-art garage space. Carriage services are performed on a daily basis on several lines (17 domestic and 6 international). The company currently has 154 employees who take care of safety, quality and maintenance, as well as organization and planning of the transport network on a daily basis. They continue to work for the purpose of improving and modernizing their means of transport as well as planning their transport routes. The next part of this paper will analyse the company's transport network in detail. The paper will focus more on the analysis of the distribution and transport network in the long-distance distribution of passengers for the region of Dalmatia. Passenger distribution and prioritization are performed by analysing the needs of previous years, according to pre-defined lines and the transport network. The company uses its own Garage Service Centre in Zagreb, and departures for all destinations are from the Zagreb Bus Station. Every day, distribution is done according to a certain location, and pre-planned route. In order to shorten travel time, the main factor in the transport route is the motorway connecting Zagreb with the final destination. The number of passengers being distributed depends primarily on the demand at a particular location, but regardless of the demand that can oscillate or be variable in certain cities, the transport plan does not change. Geographic Infor-

mation Systems (GIS) are used for presentations, and analysis of distribution and storage of spatial data, for the purpose of simpler and more efficient business planning, management and realization of the transport network in logistics (Bowersox et al., 2010).

5. Calculating model of the transport problem for Croatia Bus Ltd. (Region of Dalmatia)

Taking into account one starting point or the Bus Station in Zagreb and four destination locations, the cost of the trip will be analysed, which will be based solely on the distance parameter as the only route planning criterion. Although it is necessary to take into account a variety of parameters, such as vehicle capacity, demand, travel time, and in the case of route planning, in this case only the distance criterion (km) between the bus station in Zagreb and certain destination points will be used. It should be noted that all these parameters are equally important when planning the route and each individual needs to do a kind of analysis so that cost optimization or route planning is at an appropriate level of

efficiency and reduces the cost of the results to get the best solution. In the next part of the paper, only one criterion, distance (km) will be analysed, and towns by distance will split the route into a satisfactory criterion of the shortest route or the time of travel, and the type of problem will be the passenger problem. The problem of route determination will be divided into Transport Problem (TP1), Problem (TP2), Problem (TP3) and Problem (TP4), and will be conducted in this way through the analysis.

In order to demonstrate the benefits of implementing the information system and optimizing the entire transport process, the actual data was used and entered in the algorithm. Input data is taken for Croatia Bus Ltd., Zagreb, a transport company engaged in the carriage of domestic and international passengers. The company currently has 64 units (vehicles) and 154 drivers. Technological management includes 18 persons (administration) and 9 persons (technical service of the company). In transport management, there are 6 road users, 3 controllers and 6 persons in charge of the retail and sales segment of tickets, a total of 15 persons.

Table 1 Costs structure of costs centres and profit objects

CALCULATION OBJECT	PRIMARY INPUT COSTS	DRIVER COSTS	
		INDICATOR	DIMENSION
CENTRAL MANAGEMENT (CM)	all cost items which cannot be connected to cost of the other objects	-----	-----
TECHNOLOGY MANAGEMENT (TE)	semi-fixed: personnel costs	Working time (wt)	Man/hour
TRANSPORT MANAGEMENT (TR)	semi-fixed: personnel costs	Working time (wt)	Man/hour
MAINTENANCE (MA)	fixed: depreciation semi-fixed: personnel costs variable: material costs	Maintenance time (mt)	Man/hour
VEHICLE (VE)	semi-fixed: leasing costs, depreciation (own vehicles), insurances and taxes variable: material costs including outsourced maintenance	Vehicle running (vr)	Kilometre
DRIVER (DR)	semi-fixed: wage-related personnel costs variable: bonus or performance related personnel costs	Working time (wt)	Man/hour
TRANSPORT SERVICE (TS)	direct costs: dedicated (tolls charges, etc...) fuel costs (where appropriate)	-----	-----

Source: Bokor (2012)

The percentage of vehicles owned by the company is 90%. They fall into the group of material fixed costs, while the other percentage is part of the operational

leasing and becomes part of the material variable costs of the company. Vehicle maintenance belongs to material variable costs as well as depreciation

costs, because the company owns a dedicated service centre which is an integral part of the business. In addition to the basic fixed salary, drivers are paid daily allowances per kilometre covered and per turnover of a particular route, which is a variable cost.

Now that all business costs are characterized and all relevant data are available, a cost algorithm of the transport process can be set and the use of company fleet can be optimized. In the future, information provided to passengers ahead of and during the journey will determine their choice of the trip and the operator. By establishing an IT system the technology and transport management will be better able to decide on vehicle usage, capacity utilization, cost reduction and handling time, ultimately leading to financial savings, increasing company com-

petitiveness and facilitating business operations in any other sense. According to the above data, costs can be calculated on a monthly, quarterly and annual basis, depending on the company's business growth projection. The final set-up and cost calculation algorithm would be the following (Bokur, Markovits-Somogy, 2015):

$$C_j = C_{j(d)} + \frac{T_j}{\sum_{j=1}^m T_j} (C_{CM} + C_{(f)MA}) + \frac{Wt_{jDRY}}{Wt_{DRY}} (C_{DRY} + C_{TE} \frac{Wt_{DRYTE}}{Wt_{TE}}) + \frac{V_{rjVEX}}{V_{rVEX}} (C_{VEX} + \frac{mt_{VEXMA}}{mt_{MA}} (C_{VMA} + C_{TE} \frac{Wt_{MA,TE}}{Wt_{TE}})) + C_{TE} \frac{Wt_{VEXTE}}{Wt_{TE}} + C_{TR} \frac{Wt_{jTR}}{Wt_{TR}} \quad (8)$$

Table 2 Input data from the original data collection mechanism

	TP1	TP2	TP3	TP4
CM	Total costs (fixed): 17,257 kn			
VE (entire fleet)	Tax & insurance (semi-fixed): 1,120 kn Driver wages (semi-fixed): 1,690 kn Material costs (variable): 1,475 kn Fuel (variable): 10,190 kn Infra. user charg. (variable): 2,782 kn			
	Total km run: 3,222 km			
VE 1	Tax & insurance: 280 kn Driver wages: 245 kn Material costs: 290 kn Fuel:1,300 kn Infra. user: 340 kn	-----	-----	-----
	Total km run: 418			
VE 2	-----	Tax & insurance:280 kn Driver wages: 270 kn Material costs: 345 kn Fuel:1,890 kn Infra. user : 542 kn	-----	-----
		Total km run: 584		
VE 3	-----	-----	Tax & insurance:280 kn Driver wages:375 kn Material costs:400 kn Fuel:3,100 kn Infra. user:800 kn	-----
			Total km run: 940	
VE 4	-----	-----	-----	Tax & insurance:280 kn Driver wages: 800 kn Material costs:440 kn Fuel:3,900 kn Infra. user:1,100 kn
				Total km run: 1,280
distance	209 km	292 km	470 km	640 km
duration	total duration of services: 51 h			
	7 h	10 h	14 h	20 h

Source: Croatia Bus Ltd., Zagreb (internal data)

Table 3 Cost calculation results in HRK, based on the original data collection mechanism

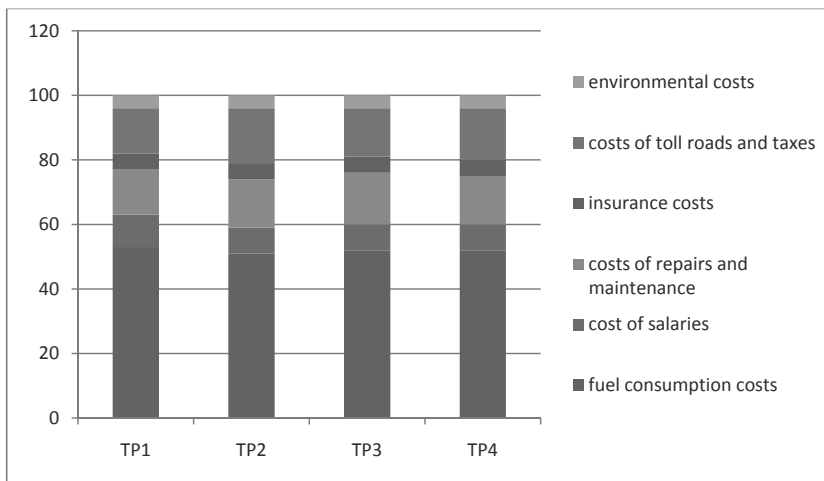
EQUATION	Tr. service 1	Tr. service 2	Tr. service 3	Tr. service 4
(5)	2,490	3,296	4,865	6,626
(6)	2,447	3,370	4,997	6,510
(7)	2,578	3,471	4,826	6,691
(8)	2,402	3,411	5,088	6,573

Source: Croatia Bus Ltd., Zagreb (internal data)

Figure 2 shows the transport cost structure for individual lines for the region of Dalmatia shown for each item, especially expressed in percentages of the total cost. The research showed that the costs were proportional to the length of the transport line. By further analysis of the data it was determined that the total cost of bus transportation is about 6.5 HRK per kilometre of the line and that it

varies more on average to 10 % depending on the influence of external factors which cannot be detected and controlled in a timely manner. By comparing the cost structure of other companies involved in the carriage of passengers, the deviations are minimal and dependent on the efficiency of the transport management that manages the fleet.

Figure 2 Transport cost structure for individual lines in [%]



Source: Authors' elaboration

6. Conclusion

Transport network planning is one of the most important tasks in a company that requires enough time and quality analysis to determine ways to reduce costs and increase efficiency. By developing information and computing technologies, the importance and use of software tools is increased in order to better utilize the transport network, as well as to optimize the entire logistic and traffic system. The increasing importance and use of software tools and solutions is characteristic for all activities, not just traffic. By optimizing and cost-cutting, despite the

limitation of data disclosure, it should be said that using this analysis and cost calculation for the company Croatia Bus Ltd. Zagreb on a daily basis has achieved financial savings of 2.7% of total expenditures for these routes. Route planning is a complex process that needs to be thoroughly analysed to see possible weak points and to detect their causes and how to remove or minimize costs or find a solution. Further analysis of other parameters affecting the efficiency of transport routes can lead to a solution that could significantly reduce distribution costs and increase the company's profitability.

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Marinko Jurčević
Tomislav Bubalo
Bia Mandžuka

UTJECAJ TROŠKOVA NA OPTIMIZACIJU TRANSPORTNIH RUTA (CASE STUDY) - TVRTKA ZA PRIJEVOZ PUTNIKA IZ ZAGREBA

SAŽETAK

Male i srednje tvrtke za cestovni prijevoz putnika sa sjedištem u Republici Hrvatskoj suočene su s jakom konkurencijom na tržištu prijevoza i logistike. Problem upravljanja troškovima u cestovnim prijevoznim tvrtkama jedan je od najvažnijih za njihovo učinkovito poslovanje. Tvrtke koje djeluju na tržištu vrlo su različite pa je važno analizirati njihovu strukturu troškova u odnosu na njihovu organizaciju. Kako bi se unaprijedio sustav i kako bi se smanjili troškovi transporta, ovaj višestupanjski model troškova, postavljen je i analiziran u ovom radu. Autori daju pregled rezultata istraživanja o strukturi troškova cestovnoga prijevozničkog poduzeća iz Zagreba i predstavlja njihove sastavnice i razlike. Autori utvrđuju i prezentiraju razlike u strukturi troškova i utjecaju troškova na optimizaciju prometnih pravaca i logističko upravljanje prijevozničkog poduzeća.

Ključne riječi: troškovi, prijevoz, optimizacija, logistika

Blaženka Hadrović Zekić

Josip Juraj Strossmayer
University of Osijek
Faculty of Economics in Osijek
Trg Ljudevita Gaja 7,
31000 Osijek, Croatia
hadrovic@efos.hr
Phone: +38531224461

Dina Liović

Josip Juraj Strossmayer
University of Osijek
Faculty of Economics in Osijek
Trg Ljudevita Gaja 7,
31000 Osijek, Croatia
dinali@efos.hr
Phone: +38531224464

UDK: 657(497.5-35Osijek)

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Ivana Dražić Lutilsky

University of Zagreb
Faculty of Economics &
Business Zagreb
Trg J. F. Kennedy 6,
10000 Zagreb, Croatia
idrazic@efzg.hr
Phone: +38512383408

(PRIOR) KNOWLEDGE OF ACCOUNTING AS A COMPARATIVE ADVANTAGE WHEN SELECTING ACCOUNTING SERVICE PROVIDERS

ABSTRACT

Regardless of the type and size of a company, a prerequisite for successful business operation, which involves complex activities, is having various skills and competencies, knowledge and resources. Engaging in entrepreneurship requires a combination of legal knowledge and knowledge in areas such as management, economics, psychology, art and many others. Knowledge in the field of economics inevitably includes accounting knowledge, which is essential for the functioning of any company. The purpose of this paper is to investigate to what extent entrepreneurs in the Osijek-Baranja County outsource accounting services, how they select accounting service providers and to what extent the accounting knowledge they had before undertaking an entrepreneurial venture affects the choice of an accounting service provider. A structured questionnaire is used to explore the effect of (prior) knowledge of accounting on the selection of accounting service providers. The target population are micro, small and medium-sized enterprises operating in the Osijek-Baranja County area. The objective of the research is to gather information on the entrepreneurs' (prior) knowledge of accounting, the ways of selecting accounting service providers and the possible influence of recommendations on their choice. The survey results provide an insight into how accounting service providers attract clients, which factors are decisive in choosing an accounting service provider and whether the entrepreneurs' (prior) knowledge affects the outsourcing of accounting services.

Keywords: Micro and small-sized enterprises (MSE), accounting service providers, outsourcing, Osijek-Baranja County

1. Introduction

Starting a business, coming up with and developing business ideas and establishing a company are all significant events in the life of any entrepreneur and for his/her environment. It is the environment that affects the development of entrepreneurial mindsets and related knowledge, skills, competencies and resources. For the last ten years, the results of the *GEM – Global Entrepreneurship Monitor* surveys have been reporting of the inadequate level of entrepreneurship in the Republic of Croatia as well as of the weak commercial and professional infrastructure for entrepreneurship development (Singer et al., 2006¹; 2007²; 2012³; 2015⁴; 2017⁵), which has been partially indirectly confirmed in the present paper. In addition, starting a business requires quite a lot of planning and effort because “for any small scale enterprise to be successful, the owners of the business must possess appropriate skills and abilities to run the business” (Nwaigburu, Eneogwe, 2013).

Financial literacy is particularly important in the early stages of starting a business, whereas accounting competences, i.e. the knowledge of accounting standards and relevant regulations are more important later on and are essential to the successful operation of an enterprise. Accounting requires knowledge and skills that not all entrepreneurs have or are even aware of when starting a business. With this in mind, the paper explores how well micro and small enterprises are equipped to perform accounting duties themselves, as well as in what circumstances they opt for outsourcing, i.e. selecting an external accounting service. It also highlights the need for entrepreneurial training and consulting services for all entrepreneurs.

2. Literature Review

Small (micro) and medium-sized enterprises are important for economic growth in any economy, whether developed or developing (Dorasamy et al., 2010). Their importance is reflected in the contribution to employment, the GDP and exports and therefore it is not surprising that they are considered the backbone of the economy. According to the latest data collected through the research carried out by CEPOR (SMEs and Entrepreneurship Policy Centre) in Croatia in 2015, there were 106,221 micro, small and medium enterprises (99.7% of the total number of registered enterprises) operating in

Croatia, whose contribution to the GDP, employment and exports amounted to 54%, 69.2%, and 50.3% respectively. All three of these key performance criteria have grown in 2015 in comparison to the previous year (Alpeza et al., 2017⁶). According to the GEM survey results, for some years now, the level of entrepreneurship in Croatia has been among the highest ranked in the EU with regard to entrepreneurial intentions, indicating the predominance of necessity-driven over opportunity-driven entrepreneurship” (Singer et al., 2017). Due to not having the required skills, companies find it hard to adapt to the environment in which they operate. Regardless of their structure and size, companies need to search for new solutions, approaches, and strategies as well as for new ways of conducting and managing their business. This is why micro and small enterprises are turning to outsourcing, a concept whose primary goal is to improve productivity, quality and efficiency of a company’s core business, and reduce the costs of non-core business activities (Liović, 2016). The term externalization is one of the many terms used in the context of and as a synonym for the term outsourcing to describe this practice in terms of the time when it is used, as it is a subsequent separation of non-core activities from core business, as opposed to the use of external services from the establishment of an enterprise. Given that the term outsourcing has taken hold in the Croatian language due to being widely used in the professional literature, it is used in this paper as well. By definition, outsourcing is the transfer of certain business processes to specialized partner companies that can perform them better and at lower costs while maintaining communication with the company with which they have signed the contract on outsourcing of a specific business function, which enables the enterprise that decided to outsource these functions to focus on their key business processes (Latinović, 2010). Moreover, since, theoretically speaking, the involvement of external partners in business operations should facilitate the operation of core business and reduce certain types of costs, and the decision to outsource some of the company’s activities should ultimately increase its profits, it can be concluded that outsourcing meets its primary objective and rightly deserves to be called a good business strategy.

Nevertheless, the perception of outsourcing and its specific nature has been distorted in Croatia due to its name. Since it is of foreign origin, an adequate

translation was sought that would fully describe everything that it involves. Additional confusion and negative perception of outsourcing in Croatia was caused by the government in 2014, when it attempted to use it in the context of contracting out some services from the government and public sector (Škugor Hrnčević, 2014⁷). Outsourcing as a concept seeks to increase competitive advantage of all types of enterprises as well as improve their position on the market, whereas in its beginnings its main goal was solely to achieve savings (Vučur, 2016).

The need to record information about all business events to facilitate control and decision making has always existed. In view of that, it can be said that accounting, i.e. the need to record business events, is as old as literacy. Nowadays, it is impossible to do business without collecting, processing and storing information about business events, that is, without accounting, which is closely related to finance and the overall operation of a business entity. Given the complexity of the accounting procedures, unless a company's core activity is accounting, or it has the staff that has been adequately trained in accounting, problems are likely to arise with coordinating all of the activities it is required to perform. The following applies to any company: without accurate business indicators and easy access to verified data, it is impossible to make the right decisions; without a well-developed tax policy, a company does not know whether it has overpaid tax or is entitled to input tax deduction; without quality reports and accurate data, the procurement department will not be able to plan properly. In short, without accounting a company does not know what it is doing. This is where accounting service providers saw an opportunity to use this "weakness" to their advantage. They provide complete accounting services, from compiling monthly, quarterly, and annual reports, harmonizing internal reporting requirements with regulatory requirements, collecting and delivering accounting records, as well as delivering them to the relevant institutions. Using advanced reporting tools, accounting service providers are able to provide a detailed insight into the business. All of the above activities are performed in compliance with laws and regulations, accounting and financial reporting standards, and accounting policies.

This paper explores outsourcing of the accounting function, which is used by a large number of micro and small enterprises. Outsourcing of the ac-

counting function, as well as all other types of outsourcing, has been developing rapidly over the past decade, owing to trade liberalization, communication technology development and constant technological growth and development. Some of the accounting services that are being outsourced are: preparation of corporate and personal tax returns, bookkeeping services, including payroll and balance sheet preparation, financial reporting, financial planning, as well as consultancy services. The main benefit of outsourcing is cost reduction; however, according to Anadachee (2012), as long as cost is the main factor in making the outsourcing decision, its real benefits will not be gained. Accounting functions play an important role in today's business. As a result, SMEs need to be aware of the importance of accounting information for better management control and decision making in order to be able to access new markets and increase their profits in the corporate world (Jayabalan et al., 2009).

The available literature and research into outsourcing in Croatia largely show that this field is still insufficiently explored. The situation is the same, if not worse, in terms of research into outsourcing of the accounting function. However, this only points to an opportunity for and the need to carry out additional research on this practice in Croatia. Previous research on this subject in Croatia has examined whether companies use outsourcing and to what extent, and has sought to determine the percentage of outsourcing specific business functions. The results indicate that outsourcing of the accounting function is used much less often, although there is a demand for it (Dražić Lutilsky et al., 2015). Undoubtedly, there are differences between outsourcing practices in Croatia and abroad. Namely, large corporations abroad try to outsource everything that is not core business. Thus, everything but core business processes and key competencies can be outsourced (Tipurić, 2016⁸). International research into outsourcing of accounting has shown that transaction cost economics is a suitable theory for studying its effects. Namely, by applying this theory, numerous authors have identified the effects of various factors on the decision to outsource accounting services as well as its effects on business performance (Arnold, 2000; Everaert et al., 2006; 2010; Hafeez, Andersen, 2014; Kamyabi, Devi, 2011b; McIvor, 2009; Neves et al., 2014).

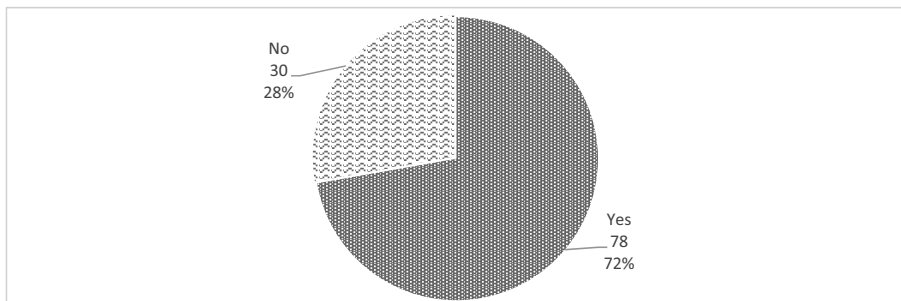
3. Data and Methodology

A survey was conducted for the purpose of exploring the practice of outsourcing accounting services by micro and small enterprises. The list of surveyed enterprises was compiled using the Croatian company directory of the Croatian Chamber of Commerce called Biznet, an intelligent enterprise information system⁹, i.e. the database containing all registered companies in Croatia. Of 107,408 active companies, for the purpose of this research we have selected companies from the list of the Croatian Chamber of Commerce, Osijek County Chamber, which covers the area of Osijek-Baranja County. The list of active companies contains 3,944 (small, medium-sized and large) enterprises of which 3,872, i.e. 98.17% are small enterprises operating in the Osijek-Baranja County. Since experience in outsourcing of accounting services was to be considered, enterprises older than 5 years, i.e. enterprises that had been established by January 1, 2012, were selected for this research. 2,342 enterprises in Osijek-Baranja County were established more than 5 years ago, of which 2,272 (97%) are micro and small enterprises. Of that number we have selected 983 (43.26%) enterprises with registered e-mail addresses in the

above-mentioned database in order to simplify the process. Although the Accounting Act¹⁰, which was adopted in 2015 and has been in effect since 1 January 2016 introduced the term microenterprise, Biznet.hr has continued to use the classification into small, medium-sized and large enterprises, and in order to simplify the research, micro and small enterprises were put in one group¹¹, which might be considered as a certain research limitation.

The survey was conducted in the period from 31 August - 13 September 2017 by sending out a survey invitation using Google Forms¹². 98 (9.97%) invitations received an instant reply that the e-mail could not be delivered. The results of the survey of 108 micro and small enterprises in the Osijek-Baranja County indicate that 78 (72.22%) of them have outsourced or are still outsourcing their accounting services. The average age of enterprises that have outsourced these services is 16 years (the oldest company was established in 1981). On average, these enterprises have 10.34 employees, with the largest enterprise having 55 employees. Nine enterprises which had previously been outsourcing their accounting services have eventually established an in-house accounting department.

Graph 1 Companies that have outsourced accounting services (N=108)



Source: Authors' calculation

Enterprises with an in-house accounting department are on average 22 years old (this group includes two old enterprises of which one was established in 1945 and another in 1956). The average number of employees in enterprises that have not outsourced their accounting function is 35.83, while the largest enterprise has 225 employees. In addition, almost all of the surveyed enterprises that have not used outsourcing established an in-house accounting

department when they started their business or are providers of accounting services themselves.

Data collected by the questionnaire were processed using Microsoft Excel analytics software package Dell Statistica 13¹³.

4. Results

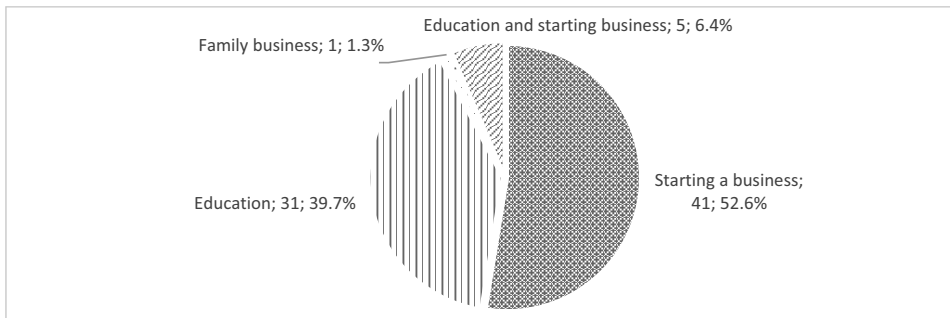
Given that this paper looks at companies that have outsourced their accounting services at some point

or are still outsourcing them, the following section of the paper analyses the answers collected from 78 (72%) respondents, i.e. responsible persons from micro and small enterprises in Osijek-Baranja County.

41 or 52.6% of the respondents learned about the requirement to make and keep accounting records when they established their company, while 31 of them (39.7%) learned about it during their educa-

tion. The remaining five respondents (6.4%) became aware of this requirement both during their education and when they started their own business, while one person (1.3%) learned about it when he/she became involved in the family business. These data coincide with the findings of the GEM reports (Singer et al., 2017) and indicate the need for stronger development of commercial and professional infrastructure as well as the development of entrepreneurial competences and financial literacy.

Graph 2 First learned about the requirement to make and keep accounting records



Source: Authors' calculation

Most of those who became aware of the requirement to make and keep accounting records when they started their business have a secondary school education - 17 (41.5%), followed by those with a master's degree - 13 (31.7%) and bachelor's degree - 7 (17%). On the other hand, the number of respondents who first became aware of this requirement during their education have either a master's degree - 14 (45.2%) or a secondary school education 8 (25.8%).

The choice of accounting service provider is not an easy one to make, which is why a manager or a business owner needs to have the necessary knowledge to evaluate the quality of the accounting service providers in terms of their experience, knowledge and skills. There is also the issue of trust. For this reason, most of the surveyed enterprises have found their service providers based on a recommendation (51.28%), or through an acquaintance (15.38%); 5% have established their own accounting department; the rest have found accounting service providers through advertisements, or a tender process, or selected them based on the comparison of their fees. It was mentioned in some of the comments written by the respondents that there were cases when

an accountant would leave an employer and the (accounting company's) clients would follow them (to the new accounting service provider) or that an enterprise would hire the accountant from the accounting service provider they were using when they established their own accounting department.

Not all accounting service providers have met the expectations or the needs of micro and small enterprises in the Osijek-Baranja County. As a result, 26 or 33.33% of the surveyed enterprises have changed their service provider 1.89 times on average. Interestingly, the respondents who first became aware of the requirement for making and keeping accounting records when they established their own company have changed the accounting service provider less frequently, i.e. 1.74 times on average (a maximum of 4 times) to date of the survey.

The surveyed companies have mostly used the services of providers registered as companies (Ltd., SLLC, i.e. simple limited liability company, etc.) - 59 of them (75.64%), while the smaller part, i.e. 18 of them (23%) have used the services provided by sole proprietorships. Five of the 41 respondents who first became aware of the requirement when they started their own business have used the ser-

vices of sole proprietorships, while almost 88% have used accounting services of providers registered as companies. On the other hand, the respondents who first became aware of the requirement to make and keep accounting records during their education have used the services of sole proprietors (7) and service providers registered as companies (11) almost equally often.

Satisfaction with accounting service providers can be assessed by looking at the respondents' rating of their satisfaction (1 = very dissatisfied, 2 = dissatisfied, 3 = neither, 4 = satisfied, 5 = very satisfied) and

their likelihood of recommending an accounting service provider to a friend (1 = extremely unlikely, 2 = likely, 3 = neither, 4 = likely, 5 = extremely likely). The average accounting service provider satisfaction rating is 4.45 (min 3, max. 5, St. dev 0.657572). The ratings are analyzed according to educational attainment as shown in Table 1. The average ratings coincide with the GEM survey results with regard to educational attainment (Singer et al., 2017: 39), i.e. they confirm that entrepreneurs with higher educational attainment expect a higher quality of service and are more critical of the quality of external services.

Table 1 Rating with regard to educational attainment

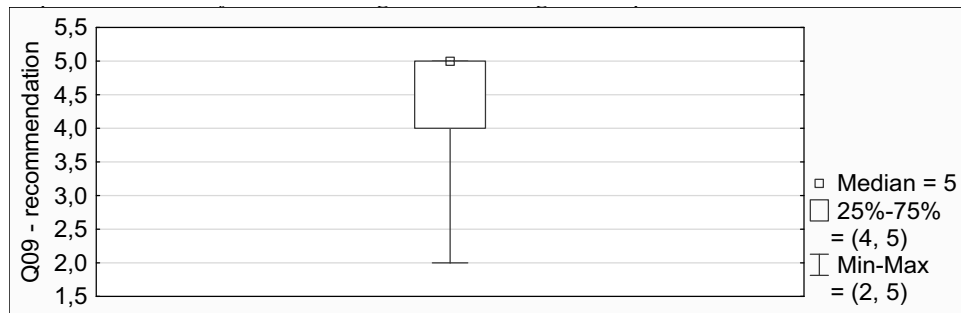
	N	mean	Min	Max	Std. dev
PhD degree	8	4.125000	3.000000	5.000000	0.834523
Master's degree	30	4.466667	3.000000	5.000000	0.628810
Bachelor's degree	12	4.500000	3.000000	5.000000	0.674200
Secondary school education	28	4.500000	3.000000	5.000000	0.638285
Total	78	4.448718	3.000000	5.000000	0.657572

Source: Authors' calculation

By comparing satisfaction ratings and the likelihood of giving a recommendation, a marked difference was found in the ratings of six respondents whose level of satisfaction with an accounting service provider exceeded the likelihood of recommending it to somebody else. This piece of information should be alarming both for service providers and for entrepreneurs because long-term cooperation might be at stake due to the quality of the service provided. The analysis of satisfaction ratings and

the likelihood of recommendation shows that the respondents who became aware of the requirement for making and keeping accounting records only when they started their own business gave lower ratings to their service providers or had higher expectations. On the other hand, five respondents reported they were extremely likely (5) to recommend an accounting service provider despite being just satisfied (4) with the service provided.

Graph 3 Likelihood of recommending the accounting service provider



Source: Authors' calculation

As the business grows, enterprises tend to establish their own accounting departments (5 out of 78 surveyed enterprises). Although the survey did not address this issue directly, the following reasons for establishing own accounting department have been reported in the comments: dissatisfaction with the quality of the service, high service fees and the possibility of hiring an accountant from the accounting service provider full-time. This trend is normal considering the growth and average age of the surveyed enterprises as well as the growing need for accounting data that the service provider is unable to provide due to a large number of clients.

Of the participating respondents, 39 (50%) are directors, 11 (14%) are owners, seven (9%) are administrators, three are accountants, three are procurators, and the rest are classified under 'others' (15). The distribution of respondents by gender reveals that 47 (60%) of the participants are male and 31 (40%) are female. In terms of their age, 5 (6%) are in their twenties, 27 (35%) are in their thirties, 26 (33%), are in their forties, and 20 (26%) are above 50 years of age.

5. Conclusion and Discussion

The results of the survey of micro and small enterprises in the Osijek-Baranja County indicate that there is a relatively large number of entrepreneurs who have started a business without being aware of the legal requirement to make and keep accounting records, and the importance and role of accounting in making business decisions. The common practice of starting a business out of necessity and inadequate entrepreneurship education and financial literacy point to the need to introduce entrepreneurship, finance and accounting into the educational system as early as possible. The proposal of the National Curriculum for the interdisciplinary subject of Entrepreneurship (Goldstein et al., 2016: 6¹⁴), which will, among other things, focus on economic education and financial literacy to "introduce students into the world of labour and finance, acquisition and distribution of outcomes".

The results of GEM surveys on the level of entrepreneurship in Croatia have been disappointing year after year. In order to be able to compete with

other EU countries, lifelong learning for entrepreneurs through formal and informal education needs to be enhanced (Singer et al., 2017). In this context, EU Skills Panorama (2014: 4¹⁵) Entrepreneurial skills Analytical Highlight emphasizes, among other things, that at the level of the European Union "[E]ngendering entrepreneurship skills involves developing: Specific, technical business-running skills e.g. developing and implementing a business plan, accounting, budgeting."

Necessity-driven entrepreneurs frequently neglect entrepreneurial education provided at the level of counties, cities and municipalities in Croatia. As shown by this survey, there is a relatively large percentage of entrepreneurs who had been unaware of the requirement for making and keeping accounting records until they started their own business. One of the possible solutions to this problem is the introduction of formal courses or examinations (e.g. EBC*L - The International Certificate for Business Competence) that have to be taken before starting a business, as it is done in some European Union countries. In addition, a large percentage of the respondents with a secondary education point to the need for introducing entrepreneurial education at all levels of the educational process (cf. Goldstein et al., 2016).

Accounting service providers should increase the quality and variety of their services to include much more than maintaining the minimum level of communication with the client and the tax administration. Their long-term goals should be not only client retention, but also growth of clients' business by offering them additional services to facilitate their business performance and improve communication. Given the increasing competition in the accounting services market, service providers should more frequently inquire about their clients' needs as well as stay abreast of and inform their clients about entrepreneurship training courses being offered, thereby improving communication with their clients to the satisfaction of both parties. Providing additional services, such as advising enterprises on how to access EU funding, can also improve the quality of communication and client satisfaction with their relationship.

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Blaženka Hadrović Zekić
Ivana Dražić Lutilsky
Dina Liović

(PRED)ZNAJJE RAČUNOVODSTVA KAO KOMPARATIVNA PREDNOST PRI IZBORU RAČUNOVODSTVENIH SERVISA

SAŽETAK

Bez obzira o kojoj se vrsti i veličini poduzeća radi, preduvjet uspješnog poslovanja i obavljanja te kompleksne djelatnosti posjedovanje je brojnih vještina, kompetencija, znanja i resursa. U poduzetništvu se isprepliću i kombiniraju zakonska i pravna znanja, kao i znanja iz područja poput menadžmenta, ekonomije, psihologije, umjetnosti i brojna druga. Pod znanjem iz područja ekonomije, neizbježno je računovodstveno znanje kao ključan i nužan segment funkcioniranja svakoga poduzeća. Svrha i cilj ovome radu istražiti je u kojoj mjeri poduzetnici u Osječko-baranjskoj županiji koriste vanjske usluge (*outsourcing*) računovodstvenih/ knjigovodstvenih servisa, na koji ih način pritom biraju te koliko im (pred)znanje računovodstva prije poduzetničkog pothvata utječe na izbor računovodstvenog servisa. Instrument istraživanja utjecaja (pred)znanja računovodstva na izbor računovodstvenih/ knjigovodstvenih servisa visoko je strukturirani anketni upitnik. Ciljana populacija anketnog istraživanja su mikro, mala i srednja poduzeća koja djeluju na području Osječko-baranjske županije. Navedenim će se istraživanjem prikupiti informacije o računovodstvenom (pred)znanju poduzetnika, načinu izbora računovodstvenog/knjigovodstvenog servisa te eventualnom utjecaju preporuka na izbor istih. Rezultati ankete upućivat će na koji način računovodstveni servisi dolaze do klijenata, što je ključno pri izboru servisa te ima li u konačnici (pred)znanje poduzetnika utjecaja na outsourcing računovodstvenih usluga.

Ključne riječi: mikro, mala i srednja poduzeća (MMSP), računovodstveni/knjigovodstveni servisi, outsourcing, Osječko-baranjska županija

PRELIMINARY COMMUNICATIONS

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Realisation of the Europe 2020 strategy and the structural funds allocation by thematic field of intervention in European regions

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Lela Tijanić

Juraj Dobrila University of Pula

Faculty of Economics and Tourism „Dr. Mijo Mirković”

P. Preradovića 1/1,

52100 Pula, Croatia

letijan@unipu.hr

Phone: +38552377063

UDK: 339.9:336](4-6 EU)

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REALISATION OF THE EUROPE 2020 STRATEGY AND THE STRUCTURAL FUNDS ALLOCATION BY THEMATIC FIELD OF INTERVENTION IN EUROPEAN REGIONS

ABSTRACT

The European Union Cohesion Policy provides financial support through EU funds and gives a unique opportunity for member states and their regions to successfully combat the obstacles of a challenging environment as well as to promote its (smart, sustainable, inclusive) growth and development. In the last programming period of 2014-2020 the Policy has been aligned with the Europe's strategy for growth and employment, Europe 2020. The regional allocation of funding has changed, where a more focused thematic concentration of financial resources is needed. There are (constant) discussions about measuring the progress towards meeting the objectives of the Europe 2020 which is connected with the implementation of the Cohesion Policy.

The aim of this paper is twofold: firstly, to give a brief overview of the connection between the reformed Cohesion Policy and strategy Europe 2020 in the last programming period of 2014-2020 and secondly, to empirically analyse whether the allocation of EU funds regarding different thematic fields of intervention can be connected with the success in the realization of the strategy Europe 2020. The findings suggest that the heterogeneity in the realisation of Europe 2020 on a regional level is connected with the structure of EU funds allocation. The conclusions of this paper can be useful in monitoring the achievement of Europe 2020, in evaluating the results and possible recasting of the Cohesion Policy.

Keywords: Cohesion Policy, strategy Europe 2020, EU funds

1. Introduction

The European Union (EU) Cohesion Policy has become one of the most important EU policies. This is seen through its role in the European multi-level (economic) governance process, development stra-

tegic planning, its share in the EU budget and more importantly, through multiplicative effects of its financial instruments that have been used in different thematic areas in the real economy across EU member states to achieve regional and national de-

developmental goals. The widespread and numerous impacts of the projects financed through EU funds¹ confirm that this policy opens an opportunity for member states and their regions to unleash their resource potential as well as to combat the obstacles of the (post-)crisis environment. In the crisis year, when public investment declined, the importance of investments through EU funds increased (European Commission – Directorate-General for Regional and Urban Policy, 2014)², while at the time when the signs of recovery are seen, the European Funds offer significant opportunities to support growth, employment and structural transformation in the member states and regions which still face fragile growth and structural weaknesses (European Commission, 2016)³.

This important “position” and the development of the Cohesion Policy have a long history. It was faced with reforms that have been implemented in order to respond to integration changes, achieve cohesion and a more focused implementation of the policy (seen through measurable effects on development). One of the reforms in the last programming period (2014-2020) has tried to connect the Cohesion Policy with the main EU strategy for growth and employment, Europe 2020, and with its goals of “smart, sustainable and inclusive growth.” In line with this, the Cohesion Policy is guided by a common strategic framework which has to be implemented across EU member states and regions, through the system of multi-level governance, connecting regions and EU member states’ needs with the goals of Europe 2020. EU funds represent important instruments in the described process. Even though this can be highlighted as a positive step to achieve better control of the Policy and the progress towards meeting the objectives of Europe 2020, there are discussions about measuring the effects, constant need to evaluate the results as well as the factors which can have an influence on the final outcomes.

Namely, due to the failure to achieve goals of the previous Lisbon strategy (predecessor of Europe 2020), the differences regarding the impacts of the Cohesion Policy across EU member states and regions, the lack of concrete economic effects in some of the EU member states that have absorbed significant amounts of EU funds or in less developed regions (which can be seen also through the so-called “regional policy paradox”), together with the necessity to evaluate the realisation of the Europe 2020 strategy, there arises the motivation of the policy ac-

tors and researchers to determine the possible obstacles in the implementation of the policy as well as in achieving the goals set in Europe 2020. This furthermore opens the question of the investment structure that can be analysed through allocation of EU funds by thematic field of intervention. It is assumed that the regional structure of EU funds investments will have a significant influence on the realisation of the strategy Europe 2020. This is also important at the time when it is necessary to start planning Cohesion Policy post 2020.

The aim of this paper is to explain the relationship between the reformed Cohesion Policy and the strategy Europe 2020 in the last programming period of 2014-2020 and, by using discriminant analysis, to empirically determine whether the structure of regional allocation of EU funds regarding different thematic fields of intervention can be connected with the realisation of the strategy Europe 2020. This approach contributes to previous studies which analyse the success in the realisation of the strategy Europe 2020 as well as the studies on the structure of EU funds investing. Theoretical background that deals with the Cohesion Policy reforms and measuring the progress towards Europe 2020 will be synthesised and elaborated in the next section. The described empirical analysis is presented in the third section, while the final section brings conclusions.

2. Theoretical Background

2.1 Reforms of the Cohesion Policy – towards the Strategy Europe 2020

Cohesion Policy, also known as the EU regional policy, represents different regional and urban development programmes, associated specific policy actions and interventions in conjunction with EU funding (European Commission – Directorate-General for Regional and Urban Policy, 2014⁴; McCann, Varga, 2015). This policy contributes today to the achievement of EU policy objectives and complements EU policies such as those dealing with education, employment, energy, the environment, the single market, research and innovation (European Commission – Directorate-General for Regional and Urban Policy, 2017b)⁵. In the last programming period, 2014-2020, the main instruments of the Cohesion Policy, the ESI Funds, are directed towards objectives of the Strategy Europe 2020, the Investment Plan for Europe and to Commission’s priorities, as can be seen in European Commis-

sion – Directorate-General for Regional and Urban policy (2015a)⁶. In the “Winter Package of the European Semester”, which was published by the European Commission as the result of the analysis of the economic and social situation in the member states, the role of ESI Funds in the EU economic governance process is affirmed (European Commission – Directorate-General for Regional and Urban Policy, 2017a)⁷. The contribution of the Cohesion Policy in producing tangible results can be observed through indicators presented on the open data portal of the European Commission (2017c)⁸.

But the “story” of EU regional policy begins in 1957 with the Treaty of Rome that highlights the need to tackle regional disparities, a goal which still has a central place in the EU regional policy. The European Commission – Directorate-General for Regional and Urban Policy (2014)⁹ describes in more detail the evolution of the Cohesion Policy, where it can be seen that the nature of policy has developed and changed, from the national focus to greater involvement of regional and local policy actors. The significant change towards subnational and European influence was recognized in 1988, 1989, after the integration of the Structural Funds to achieve economic and social cohesion.¹⁰

Enlargements of the EU with diverse member states and their regions with lower levels of development, as well as further economic challenges have triggered new directions in the EU regional policy, which have resulted in the increase and changes in the distribution of funding for the Policy, more targeted investments, incorporation of the key principles of the regional policy, multiannual programming, the rules on partnership, introduction of territorial cohesion, the need for better evaluation and the implementation of different instruments to facilitate the realisation of the projects. Through the time, the Cohesion Policy has been aligned with the overall policy agenda of the EU. In the programming period 2014-2020 this is recognized in the need for stronger conditionality of the Cohesion Policy, as well as through the necessity for consolidation of outputs and results at the European level. It is planned that member states and regions will direct the funds towards defined investment priorities aligned with the Europe 2020 strategy and its thematic objectives, but according to their developmental needs.

The European Commission – Directorate-General for Regional and Urban Policy (2014)¹¹ furthermore

describes that the focus of tackling unemployment, mobility of workers, industrial reconversion and modernisation of agriculture has been extended to include infrastructure problems, business support, innovation, education, environmental quality, combating climate change, poverty, social inclusion etc. which was seen in the allocation of funding between thematic objectives, different across the European regions. Dumciuviene, Stundziene (2015) conclude that the right distribution can be an important factor determining the continuity of the integration process and that the EU funds should be used purposefully and efficiently to ensure that the developed mechanisms will meet the national priorities. Crescenzi et al. (2017) analyse 15 EU regions, beneficiary areas, and confirm that the structure of expenditures, concentrations of funding and effective targeting are important for the effectiveness of Cohesion Policy interventions in regional growth.

Even though there are numerous examples where the impacts of EU funds were positive and have contributed towards achieving the goals of the EU funds on national and regional levels (Medeiros, 2014), there are also examples where the Funds do not target the problems regarding the defined goals and priority areas, thus hampering the successful restructuring of regional economy (Kaufmann, Wagner, 2005), which may have implications on the realisation of Europe 2020. This motivates further investigations of the causes that have led to differences in the results. Based on previous theoretical elaboration, the reason can be seen in lacking the right approach to interventions, where the developmental goals and the structure of investments are not interconnected. Here arises the main research question: is the structure of EU funds investments significant for the realisation of Europe 2020? Before investigating the connection between the structure of EU funds (observed in this paper through thematic allocation of EU funds) and the realisation of Europe 2020, a theoretical overview on measuring the progress towards Europe 2020 to define adequate framework for performing the analysis is given in the next section.

2.2 Measuring the Progress towards Europe 2020 – Multi-level Monitoring

The importance of the strategy Europe 2020 and the need to monitor its implementation is seen in a number of papers which present the observations

about the Strategy, its concept, usefulness, criticism, realisation or possible recasting (e.g. Erixon, 2010; Budd, 2013; Petru, Dobrescu, 2014; Makarović et al., 2014; Stec, Grzebyk, 2016). Even though there are some criticisms, the European Commission (2017a)¹² presents the results of public consultations that have shown Europe 2020 is still seen as an appropriate framework and it decided to continue with its implementation and monitoring.

There has also been a growing number of studies on the relationship between regional development and the Europe 2020 strategy (Eurostat, 2016)¹³. McCann (2015) writes about the Europe 2020 strategy and its regional and urban dimensions, where it is highlighted that the multi-dimensional approach in the Europe 2020 strategy must be observed with regional and local challenges, while confirming that Cohesion Policy plays a significant role in driving Europe 2020. In the Eurostat Regional Yearbook (Eurostat, 2016)¹⁴, the importance of territorial dimension for Europe 2020 is explained. One of the important documents in this context, the Athens Declaration¹⁵, "called for the introduction of the monitoring system for Europe 2020 at regional level, which requires adequate statistical basis at regional and local levels and possible development of regional progress indicators" (Eurostat, 2016: 24)¹⁶. Eurostat (2016)¹⁷ furthermore confirms the arising need to align and match regional funding with the Europe 2020 strategy and to monitor the regional performance according to Europe 2020 targets.

In observing the implementation of the strategy Europe 2020 on the regional level, different approaches, indicators and methods are used. Here it can also be useful to take into account the possibilities to monitor the results on integration and national level, which must be complemented with the regional evaluations. The European Commission (2017a¹⁸, 2017b¹⁹) describes the implementation, monitoring of the strategy and gives an overview of the Europe 2020 targets on the EU member states level. It has an important role in analysing the EU member states' efforts towards the targets (which is seen in the context of the European Semester, explained in European Commission, 2017d²⁰). The EU statistical office, Eurostat (2017a²¹, 2017b²², 2017c²³), publishes Europe 2020 indicators on the national and EU level, as well as cohesion indicators, grouped according to the objectives of Europe 2020, at the sub-national level. Analyses of the available EU Member States regional indicators relating

to a range of Europe 2020 indicators are presented in the Eurostat (2016)²⁴, where diverse patterns of socio-economic development with respect to the targets are confirmed.

The Europe 2020 Monitoring Platform (European Committee of the Regions, 2017)²⁵ is a network of regions and cities that was set by the European Committee of the Regions, to monitor the implementation of the Europe 2020 strategy at regional and local levels. There can be found monitoring reports on Europe 2020 and the European Semester, territorial analysis of the main documents of the European Semester, good practices, guidelines in order to explain how local and regional units can contribute to the implementation, proposals of the Steering Committee of the Committee of the Regions' Europe 2020 Monitoring Platform and other important publications. The mentioned publications imply that regions have a significant role in accomplishing the Europe 2020 targets.

In Eurostat (2016)²⁶ it is synthesized that Joint Research Centre and the European Commission's Directorate-General for Regional and Urban Policy have released studies based on composite indicators linked to the socio-economic performance of EU regions. These studies are also important because some of them represent regional analyses in relation to the Europe 2020 strategy (Athanasoglou, Dijkstra, 2014²⁷; Dijkstra, Athanasoglou, 2015). Athanasoglou, Dijkstra (2014)²⁸ develop a composite indicator "Europe 2020 Regional Index" to measure regional progress in meeting the objectives of the Europe 2020. According to the authors, the index is developed on regional NUTS (Nomenclature of territorial units for statistics) 2 level to obtain a spatially refined appreciation of the strategy's goals and future challenges. They hope that European policy makers will find the Regional Europe 2020 Index useful in gauging current regional performance with respect to Europe 2020 objectives, and designing the next steps of Europe 2020's successful implementation (Athanasoglou, Dijkstra, 2014: 39)²⁹. Methodologically, the index follows the approach of the previous Lisbon Index (Dijkstra, 2010), which is recognized as relevant to the Europe 2020 index together with the Competitiveness indices (Dijkstra et al., 2011; Annoni, Dijkstra, 2013³⁰; Annoni et al., 2017). Among other, the results have confirmed significant inter-regional heterogeneity of Europe 2020 performance. Dijkstra, Athanasoglou (2015), in the final version of the Europe 2020 Index extend the

analysis to three composite indicators to measure the progress of EU countries, regions and cities to the objectives of the Europe 2020 strategy.

Valuable measuring based on Europe 2020 indicators can be found in the following works. By using selected methods of multivariable objects hierarchy and classification, Klonowska-Matynia, Sasin (2015) have used indicators described in the framework of the Europe 2020 strategy to isolate groups of EU countries with similar development levels. The significant differences between the new and old member states due to the level of fulfilment of the aims of Europe 2020 were confirmed by using the zero unitarization method in Barcerzak (2015). Pasimeni, Pasimeni (2016) perform evaluation of countries' performances using the Europe 2020 Index and by using multiple linear regression analysis confirm the importance of formal and informal institutions and especially institutional variables, such as good governance and social capital. The territorial dimension of the Europe 2020 strategy can be seen in the ESPON (2013)³¹. Through different indicators (of smart, sustainable and inclusive growth), ESPON Atlas illustrates the differentiated regional contributions to the mentioned Strategy and confirms that achieving a smart, sustainable and inclusive growth has a territorial dimension.

In analysing the implementation of Europe 2020 on regional level, cohesion indicators can be also useful. Rakauskienė, Kozlovskij (2013) explain that the indicators of economic, financial and technological/innovative cohesion can be used in the analysis of the economic aspect of cohesion. In the Sixth report on economic, social and territorial cohesion (European Commission – Directorate-General for Regional and Urban Policy, 2014)³², separate chapters (among others) discuss the results regarding smart, inclusive and sustainable growth and how Cohesion Policy made a contribution to these goals, where different regional aspects (indicators, impacts) are observed. The Seventh progress report on economic, social and territorial cohesion also shows urban and regional dimensions of the Europe 2020 strategy (European Commission, 2011)³³.

This overview of measuring the progress towards Europe 2020 has confirmed that it is important to monitor the realisation of the Strategy on the regional level and to try to find the causes of differences between countries and regions in their success to achieve the defined strategic goals. Empirical investigation which starts with the assumption that

the allocation of EU funds by different thematic fields of intervention has a significant influence on the success in the realisation of the Europe 2020's goals will be presented in the next section.

3. Empirical Analysis

3.1 Methodology, Units of Analysis and Data

The aim of the empirical part of this paper was to analyse whether there are significant differences between the European NUTS 2 regions in the realisation of the Europe 2020 strategy regarding the allocation of EU funds and to describe the variables that discriminate these two groups if they exist. Discriminant analysis was chosen as a possible suitable method that can be used to empirically investigate the defined question. The application of this method was used in different studies which aimed to identify the variables that distinguish different groups of entities (e.g. Božić, 2007; also in regional studies (e.g. Pompili, 1994; Kurnoga Živadinović, 2007; Salvati, Sabbi, 2014)).

The first problem that arises in this analysis is how to measure the realisation of the Europe 2020 strategy? The importance of setting the adequate performance framework and indicators that can be used for this purpose are described in the previous section. "The Europe 2020 Regional Index" (Dijkstra, Athanasoglou, 2015) is included as a relevant composite indicator in our analysis, as the unique, the most complete composite indicator that measures the realisation of Europe 2020 on the EU regional level (with the limitations of composite indicators that have to be taken into account when using these or similar indicators). It extends and updates the analysis of the urban and regional dimensions of Europe 2020 that were first examined in the Seventh progress report on economic, social and territorial cohesion in 2011 and in the Sixth cohesion report in 2014 (Dijkstra, Athanasoglou, 2015). We have chosen to use the last available data of the Europe 2020 index, expressed as the distance to 4 EU headline targets (where 100 meets or exceeds all targets, 0 means farthest removed from all targets). The regions which have the values of the Europe 2020 index – 4 EU headline targets below 60 are categorized as regions which are less successful in the realisation of Europe 2020 in comparison with the regions which have this index in the values above 60. This represents the two-group single nonmetric dependent variable (VAR 1).

The data on estimated total allocation 2007-2013 (ERDF, ESF and Cohesion Fund) by NUTS 2 regions and by theme (based on the European Commission – Directorate-General for Regional and Urban Policy, 2015b³⁴) were taken into consideration to define the independent variables (expressed per capita). These allocations are also in line with the previous theoretical observations on the structure of investing. The independent variables can be seen below.

VAR 2 – innovation and research and development

VAR 3 – assistance to small and medium enterprises and business support

VAR 4 – business infrastructure

VAR 5 – basic infrastructure

VAR 6 – energy

VAR 7 – environment

VAR 8 – culture, heritage and tourism

VAR 9 – human resources, social infrastructure and integrated projects for urban and rural regeneration

The sample consists of 272 NUTS 2 regions, where according to the defined criteria explained above, 168 were determined successful in achieving the

goals of Europe 2020 and 104 had less successful results. Other preconditions for the discriminant analysis were checked and resolved. Due to correlations, VAR 3 (assistance to small and medium enterprises and business support), VAR 7 (environment), VAR 8 (culture, heritage and tourism) were not included in the further analysis. The results and the interpretation of the results are presented in the next section.

3.2 Results and Discussion

Discriminant analysis was used to classify the observation in the defined groups of the dependent variable, based on the chosen independent variables (Kurnoga Živadinović, 2007). Regarding the previous works that present or have used this method of analysis (e.g. Božić, 2010), as well as guidelines and applications in Hair et al., (2010), forward stepwise analysis was performed to determine if the independent variables are able to discriminate these groups. The variables which have a statistically significant influence in differentiating between groups of regions successful and less successful in the realisation of Europe 2020 are presented in Table 1.

Table 1 Variables in the model

Wilks' Lambda: .65843 approx. F (4.267)=34.627 p<0.0000						
N=272	Wilks' Lambda	Partial Lambda	F-remove (1.267)	p-level	Toler.	1-Toler. (R-Sqr.)
VAR 9	0.699594	0.941163	16.69167	0.000058	0.448489	0.551511
VAR 4	0.693366	0.949616	14.16617	0.000206	0.395999	0.604001
VAR 2	0.706521	0.931934	19.50085	0.000015	0.480216	0.519784
VAR 5	0.666511	0.987878	3.27640	0.071407	0.401328	0.598672

Source: Author's calculation

The significant value of Wilks' lambda implies that two groups have different arithmetic means. It can be seen that ERDF, ESF and Cohesion fund allocations in human resources, social infrastructure and integrated projects for urban and rural regeneration, business infrastructure, innovation and research and development and basic infrastructure represent the variables which significantly con-

tribute to the differentiation between the groups of regions that are successful and less successful in achieving the results of Europe 2020. The variable which is not included in the model (refers to investment in the field of energy) is presented in Table 2.

Table 2 Variables that are not in the model

N=272	Df for all F-tests: 1.266					
	Wilks' Lambda	Partial Lambda	F to enter (1.267)	p-level	Tolerance	1-Toler (R-Sqr.)
VAR 6	0.657061	0.997918	0.554917	0.456973	0.517225	0.482775

Source: Author's calculation

Detailed analysis has confirmed that one discriminant function creates the difference between successful and less successful regions. According to the means of canonical variables, the author has also determined that the discriminant function discriminates the most the regions which are less successful. Below are presented the results important in deriving further conclusions. Namely, Table 3 presents the factor structure matrix (used to give discriminant functions an interpretative meaning), which shows the variables that determine the discriminant function.

Table 3 Factor Structure Matrix

Variable	Root 1
VAR 9	0.815186
VAR 4	0.793504
VAR 2	0.332697
VAR 5	0.756009

Source: Author's calculation

From the presented structure coefficients in Table 3 it can be seen that allocation to human resources, social infrastructure and integrated projects for urban and rural regeneration, business infrastructure and basic infrastructure contribute the most to differences between less successful and successful regions in achieving the results of the Europe 2020 strategy. Allocations to innovation and research and development follow. Regarding the above described results, it can also be seen that the allocations to innovation and research and development are more important for successful regions.

The classification matrix (based on two classification functions determined by the author in the detailed analysis) presented in Table 4 implies that 82.35% of regions are correctly classified.

Table 4 Classification Matrix

Variable	Percent correct	No p=.38235	Yes p=.61765
No	71.15385	74	30
Yes	89.28571	18	150
Total	82.35294	92	180

Source: Author's calculation

The results confirm that inter-regional heterogeneity of Europe 2020 performance found in Dijkstra, Athanasoglou (2015) (as well in Athanasoglou, Dijkstra, 2014³⁵), is connected with the structure of EU funds allocations. This implies that the significant differences between regions regarding the structure of investing will also influence the appropriate policy interventions. The importance of focusing on different determinants, depending on the region's assets, was seen in Berkowitz et al. (2015). The authors explain that according to place-based approach it is possible to tailor policies to local conditions, and that policy mix may need to focus on different determinants. We agree with Dijkstra, Athanasoglou (2015) that spatially-blind policies are not sufficient to address the performance gaps in Europe 2020 index within a single member state, as well as with the European Commission – Directorate-General for Regional and Urban Policy (2014)³⁶ which states that it is necessary to identify the appropriate policy mix in addressing determinants responsible for lagging development, through a multi-level governance process.

4. Conclusions

Reforms that have aligned Cohesion Policy with the European economic governance have contributed to better coordination and more focused implementation towards the strategy Europe 2020. This study confirms that the implementation of the strategy

Europe 2020 must be observed on the regional level regarding significant differences across regions in achieving the results.

The paper furthermore deals with the analysis of the underinvestigated relationship between the realisation of the strategy Europe 2020 on the regional level and the structure of EU funds by thematic field of intervention. The results imply that regional and thematic tailored interventions are necessary in achieving the goals of Europe 2020, as well as adequate monitoring of the results. Allocations connected with human resources, social infrastructure, integrated projects for urban and rural regeneration, business and basic infrastructure, innovation and research and development provide significant differentiation between the groups of regions regarding their success in the realisation of the strategy Europe 2020. The conclusions can be useful in monitoring the results of Europe 2020, in measur-

ing the effects of the EU funds absorption and in possible recasting of the Cohesion Policy.

Future researches should observe these significant determinants in more detail to partially evaluate their connections with the strategy Europe 2020 performance and possibly to suggest how to maximise the impact of investments. Data on payments should be included in the analysis to compare the given conclusions. Because the variables in this analysis are grouped according to thematic field of intervention, it would be useful to test the stability of results by using a different (more detailed) structure of thematic axes. It would also be desirable to investigate if the results differ by changing the threshold criteria for the less successful and more successful regions. Due to heterogeneity of the regions it will be valuable to study the differences between different typology of regions.

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Lela Tijanić

REALIZACIJA STRATEGIJE EUROPA 2020 I TEMATSKA ALOKACIJA SREDSTAVA IZ STRUKTURNIH FONDOVA U EUROPSKIM REGIJAMA

SAŽETAK

Kohezijska politika Europske unije pruža financijsku pomoć kroz EU fondove, otvara jedinstvenu priliku državama članicama i njihovim regijama da se uspješno suoče s preprekama izazovnog okruženja, kao i da ostvare (pametna, održiva, uključiva) rast i razvoj. U posljednjem programskom razdoblju 2014. – 2020. kohezijska politika usklađuje se s Europom 2020, europskom strategijom za rast i zapošljavanje. U skladu s potrebama, regionalna alokacija sredstava se promijenila te je u novom razdoblju potrebno koncentrirati sredstva prema usmjerenim tematskim prioritetima, kako bi učinak ulaganja bio veći. Mjerenje rezultata ostvarenja ciljeva strategije Europe 2020 koje je povezano s implementacijom kohezijske politike područje je (konstantnih) rasprava.

Cilj rada je ponajprije sažeto prikazati povezanost između reformirane kohezijske politike i strategije Europa 2020 u posljednjem programskom razdoblju 2014. – 2020., a nakon toga empirijski analizirati je li različita tematska alokacija sredstava iz EU fondova povezana s uspjehom u realizaciji strategije Europa 2020. Rezultati upućuju da je heterogenost u realizaciji Europe 2020 na regionalnoj razini povezana sa strukturom alokacije sredstava iz EU fondova. Zaključci rada mogu biti zanimljivi u praćenju ostvarenja Europe 2020, u evaluaciji rezultata i mogućim promjenama kohezijske politike.

Ključne riječi: kohezijska politika, strategija Europa 2020, EU fondovi

Marija Martinović
University of Dubrovnik
Department of Economics
and Business Economics
Lapadska obala 7,
20000 Dubrovnik, Croatia
marija.martinovic@unidu.hr
Phone: +38598802468

Petra Barišić
Žrtava s Dakse 32,
20000 Dubrovnik, Croatia
petrabarisic@hotmail.com
Phone: +3850976994999

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THE IMPACT OF INDIVIDUAL HETEROGENEITY ON BUILDING CUSTOMER LOYALTY

Abstract

Consumer loyalty is a powerful source of competitive advantage. Managers should pay more attention to the factors that could improve the long-term relationship between consumers and companies. The aim of this study is to explore predictors of customer loyalty in the retail bank sector in order to identify the effect of stability perceptions in addition to customer satisfaction and service quality which have been traditionally accepted as the primary predictors of customer loyalty, especially for services. Another purpose of the study is to investigate the moderating effects of gender, age and income on the mentioned relationships. A random sample of Croatian bank customers was surveyed to collect information on customer perceptions and behaviours in relation to satisfaction with service quality, stability and loyalty. The research results revealed that service quality, consumer satisfaction and stability perceptions have a significant impact on consumer loyalty. Furthermore, age has a moderating effect on the relationship between satisfaction and loyalty as well as on the relationship between quality and loyalty. Thanks to the specialty of the banking sector, gender, age and income moderate the relationship between perceived stability and loyalty.

Keywords: Competitiveness, customer loyalty, service quality, consumer satisfaction

1. Introduction

Customer loyalty generates many benefits for companies like lower price elasticity, lower relationship costs, the possibility of increasing income over time, chance of achievement of new customers because of loyal consumers' suggestions, lower sale and promotion efforts etc. (Reichheld, 1993). On the other hand, not only firms, but also consumers gain from loyalty due to the fact that consumer loyalty decreases the cost of making search and evaluation of purchases in terms of selling promotion, eligibility, financial condition etc. (Gümüşbuğa, 2009).

Similar to all companies in the service sector, loyalty development is a key strategic goal for companies in the retail banking area. Lower entry barriers and thus strong competition have forced bank managers to pay more attention to building long-term relationships with consumers. The need for tighter associations was also caused by a recent global financial crisis and particularly the Swiss franc crisis that affected many individuals in Croatia. Consequently, bank loyalty is threatened by the fear of financial market instability and potential personal losses.

Studies on consumer loyalty have debated the necessity of taking individual heterogeneity into consideration (Floh et al., 2014). Model validation with entire samples may suffer from aggregation bias, and the effectiveness of marketing campaigns may not be realized as expected. Compared with mass marketing, targeted marketing might produce revenues and profits more efficiently. For those reasons, individual heterogeneity must be considered in the studies of consumer loyalty. A moderation arrangement of individual heterogeneity can help managers to adapt better loyalty programs and enhance current knowledge. A review of prior studies discloses that age and gender are two typical variables of individual heterogeneity (Venkatesh, Morris, 2000), and this study investigates whether and how the effects of loyalty determinants differ across age and gender categories. Since this paper investigated consumer loyalty to the retailing banks in Croatia, income is included as a moderating variable.

Finally, this study has two main objectives: 1. To estimate the relative influence of the key predictors on consumer loyalty: consumer satisfaction, service quality and perceived stability of the bank sector. 2. To understand the moderating effects of individual heterogeneity: gender, age and income.

2. Literature Review

2.1 Consumer Loyalty

Loyalty is one of the variables most studied in the area of consumers' behaviour. While some authors reduce the concept of loyalty to repetitive purchase (Oliver, 1997; Buttle, Burton, 2002), others add an attitudinal component (Czepiel, Gilmore, 1987; Dick, Basu, 1994; Gremler, Brown, 1996; Srinivasan et al., 2002).

According to Oliver (1997), loyalty is defined as the commitment of repetition of the purchase of products and services consistently in the future, against all odds and at all costs despite strong marketing efforts of competitors. This concept of the loyalty from the behavioural point of view limits distinguishing loyal customers from those who buy on a regular basis.

For this reason, several researchers define loyalty not only from the behaviour, but from the attitude

perspective, since the simple repetition of purchase may be due to inertia, indifference or switching costs (Jacoby, Kyner, 1973; Reichheld, 2003; Chaudhuri, Leagues, 2009).

Thus, from an attitudinal approach, loyalty has been conceptualized as a favourable attitude towards the dealer that results in the behaviour of repetition of purchase (Dick, Basu, 1994; Srinivasan et al., 2002). In this context, various aspects have been considered when defining loyalty, such as: the desire for recommendation to third parties (Zeithaml et al., 1996; Butcher et al., 2001), the consideration of the supplier as the first choice (Mattila, 2001) or the feeling of attachment to the service or its provider (Fournier, 1998).

2.2 Consumer Satisfaction

The existing literature indicates a wide variance in the definitions of satisfaction. Generally, two basic approaches could be identified: the cognitive and the emotional (Oliver, 1997). The cognitive perspective implies that satisfaction is the result of a process of evaluation of the perceived discrepancy between expectations and the actual result (Tse, Wilson, 1988; Oliver, 1980). On the other hand, the emotional approach implies a pleasant fulfilment of a need, desire or goal (Oliver, 1997). In this way, satisfaction is considered as a global emotional response of the consumer to the experience completed at a time following the purchase. This view seems to be more appropriate for the evaluation of services. Due to its intangible nature, the emotional response after consumption could be better evaluated (Ekinci et al., 2008).

Nowadays, a substantial sum of banks directs their strategies towards customer satisfaction (Arbore, Busacca, 2009). Researchers such as Winstanley (1997), Ehigie (2006) and Ndubisi (2006), have proven that customer satisfaction is a link between critical customer behaviours and the tendency of an individual to consider his bank as one that he has a relationship with. Liang et al. (2009) stated that loyalty is the most important factor in predicting customers' repetitive purchasing intentions. Therefore, the H1 could be stated:

H1: Consumer satisfaction has a positive effect on consumer loyalty.

2.3 Service Quality

Researchers have identified other factors that influence customer satisfaction and loyalty. For example, service quality has been viewed as a factor that has a strong link to satisfaction (Taylor, Baker, 1994; Levesque, McDougall, 1996; Johnston, 1997; Lassar et al., 2000; Oppewal, Vriens, 2000; Jamal, Naser, 2002; Ndubisi, 2006; Arbore, Busacca, 2009; Culiberg, Rojšek, 2010). Parasuraman et al. (1985) claimed that service quality consists of five dimensions: reliability, tangibles, responsiveness, assurance and empathy.

Zeithaml (1988) defined perceived service quality as the customer's assessment of the overall excellence or superiority of the service. There is a general consensus among the researchers that quality performance leads to satisfaction (Anderson, Sullivan, 1993; Dabholkar et al., 2000; Olsen, 2002). According to Hurley and Estelami (1998) the perceptions of service quality cause feelings of satisfaction which, consequently, influence future purchase behaviour.

Arasli et al. (2005) found that service quality has a positive effect on customer satisfaction in the Greek-Cypriot banking sector. Ehigie (2006) carried out research in Nigeria and found that service quality and satisfaction were strongly related to customer loyalty. Bloemer et al. (1998) found that service quality had both a direct and an indirect effect, through customer satisfaction, on customer loyalty. Consequently, the H2 and H3 are suggested as follows:

H2: Service quality has a positive effect on consumer loyalty.

H3: Service quality has a positive effect on consumer satisfaction.

2.4 Retail Bank Stability

There are very few papers investigating the influence of sector stability on consumer loyalty. Northcott (2004) examines the role of stability and regulation in banking systems. Consumers' perceptions of these factors may intervene in the relationship between drivers of loyalty and loyalty itself. Baumann et al. (2017) compared consumers' loyalty in two different financial markets. Authors have developed loyalty models for a steady market (Australia) and a volatile market (Greece). The study has demon-

strated the important role of market conditions in loyalty development.

Perceptions of stability are the extent to which the customer perceives the financial system within the country to be stable and the extent to which domestic banks generally are at risk of bankruptcy, again in isolation and relative to other countries (Baumann et al., 2017). Hence, the H4 could be stated:

H4: Stability perception has a positive effect on consumer loyalty.

2.5 Individual Heterogeneity

Since every person has a different combination of characteristics and each one is unique; their views, expectations and behaviours are different. Furthermore, they experience different feelings and thoughts and they act differently under the same situations. In accordance to the examined literature, customer's personal features are not taken into consideration as predictors of customer loyalty. Considering the customer loyalty concept independently from individual dimensions is not an adequate method to understand loyalty. In this context, the role of personal characteristics like gender, age and income in consumer loyalty is investigated.

Moreover, market segmentation is one of the basic marketing tools, especially in companies in the service sector (Díaz et al., 2000). Service providers recognise that they can increase profits by identifying groups of customers with different behaviours and responses (Rust et al., 2004). Given the need to adapt commercial strategies to the specific requirements of each group of customers, the study of segmentation continues to be a topic of interest even now (Becker et al., 2013; Floh et al., 2014).

It is therefore necessary to understand market heterogeneity to improve the process that leads to loyalty. In accordance to these statements, the following hypotheses could be postulated:

H5: Gender moderates the relationship between consumer satisfaction and consumer loyalty.

H6: Age moderates the relationship between consumer satisfaction and consumer loyalty.

H7: Income moderates the relationship between consumer satisfaction and consumer loyalty.

H8: Gender moderates the relationship between service quality and consumer loyalty.

H9: Age moderates the relationship between service quality and consumer loyalty.

H10: Income moderates the relationship between service quality and consumer loyalty.

H11: Gender moderates the relationship between stability perception and consumer loyalty.

H12: Age moderates the relationship between stability perception and consumer loyalty.

H13: Income moderates the relationship between stability perception and consumer loyalty.

3. Research Methodology

In order to test the hypothesis, a questionnaire study was conducted. The variables and measurements are formed according to the previously analysed literature. To ensure the adequate measurements and reliability of data, a preliminary research was performed. The sample was generated from the population of clients of major banks in Croatia. The variables and measurements are presented in Table 1.

Table 1 Variables measurements

Variables	Measurement	Source
Dependent		
Loyalty (4 items) (L1) I would recommend my bank to others. (L2) My bank offers me many benefits. (L3) Services of my bank are superior in comparison to competitors. (L4) Number of banks	1 – 5 1-strongly disagree 5-strongly agree 1 bank-5 or more	Oliver, 1997
Independent		
Satisfaction (2 items) (SA1) Total satisfaction with the bank. (SA2) Fulfilled expectations	1 – 5 1-strongly disagree 5-strongly agree	Oliver, 1997
Quality (4 items) (Q1) Staff (Q2) Reliability (Q3) Accessibility (Q4) Product adaptation	1 – 5 1-strongly disagree 5-strongly agree	Zeithaml, 1988
Stability (3 items) (ST1) Risk of bankruptcy (ST2) Prices and fees (ST3) Comparison to EU countries	1 – 5 1-completely unstable 5-completely stable	Baumann et al., 2017
Control		
Gender	0-Male 1-Female	Venkatesh and Morris, 2000
Age	16-24, 25-34, 45-54, 55-64, 65 and more	Venkatesh and Morris, 2000
Income	Under average, average, above average	In depth interview

Source: Authors

A total of 550 questionnaires were prepared for the study. The purposively selected banks were

those that were ranked as the top five by the Croatian Central Bank (www.hnb.hr; June 12, 2016) and

that had their offices in cities in which the research took place; Dubrovnik, Split and Zagreb. Thus, the following five banks were qualified for the study: Zagrebačka banka, Privredna banka Zagreb, Erste Bank, Raiffeisen Bank Austria and Splitska banka. A total of 110 questionnaires were assigned to each bank in each city (30 questionnaires per bank in Dubrovnik, 40 questionnaires per bank in Split, and 40 questionnaires per bank in Zagreb). A total of 9 research assistants were trained for the study. The research was conducted the same day and time, to prevent users of more than one bank from repeated participation. The questionnaires were left with bank officials on their individual desks and offered to the customers. The research was conducted during September and October in 2016. A total of 187 respondents participated in the study. The return rate was 34%.

4. Research Results

In this survey, 187 valid questionnaires were received. The gender structure is as follows: 81 male and 106 female respondents. Only one respondent had primary education, 111 respondents had secondary and 75 higher education. Approximately one third of respondents were 25-34 years old, 40 were 35-44 years old, 48 were 45-54 years old, 12 were older than 65, 10 were 16-24 years old and eight were 55-64 years old. Twenty respondents stated that they had under average income, 77 had average income and 86 had above average income.

The first step in the statistical analysis is to check for reliability (Table 2). For this purpose, the Chronbach alpha was calculated. As it can be seen, all alpha values are above 0.6 which could be considered as satisfactory.

Table 2 Descriptive statistics and reliability

Variables	N	Mean	Std. deviation	Cronbach alpha
Loyalty				
L1		4.404	0.734	
L2	187	3.923	0.917	0.646
L3		3.705	0.889	
L4		3.656	1.087	
Satisfaction				
SA1	187	4.153	0.797	0.631
SA2		3.803	0.722	
Quality				
Q1		4.186	0.644	
Q2	187	4.230	0.712	0.616
Q3		4.337	0.707	
Q4		3.754	0.748	
Stability				
ST1	187	3.033	0.654	0.750
ST2		2.650	0.709	
ST3		2.900	0.738	
Gender	187	0,557	0.498	-
Age	187	3,082	1.266	-
Income	187	2.361	0.672	-

Source: Authors' calculation

Before proceeding to regression analysis, it is necessary to provide construct validity evidence through

confirmatory factor analysis. The sample adequacy was tested by the KMO and Bartlett's Test (Table

3). The KMO ranges from 0 to 1 and the acceptable value should be above 0.6. In this case, the KMO accounts for 0.668 and it may be considered as satisfactory. The Bartlett's Test of Sphericity presents the significance of the model. In this case, the value is 0.000 (less than 0.05). That means that the model is significant and suitable for further analysis (Table 4).

The results of the factor analysis confirm that independent variables belong to three groups. The criteria were that factor loadings should be above 0.6 and eigenvalues above 1. However, variable Q4 did not correspond to any component. Variable Q1 proved to be out of the quality component. Consequently, those variables were excluded from further study.

Table 3 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.668
Bartlett's Test of Sphericity	Approx. Chi-Square	360.786
	df	36
	Sig.	0.000

Source: Authors' calculation

Table 4 Factor analysis of independent variables

Rotated Component Matrix ^a			
	Component		
	1	2	3
Q1	0.161	0.621	0.372
Q2	0.075	0.035	0.832
Q3	-0.032	0.177	0.696
Q4	0.416	0.240	0.466
SA1	0.131	0.800	0.011
SA2	-0.151	0.831	0.131
ST1	0.769	0.026	0.157
ST2	0.826	0.056	-0.181
ST3	0.813	-0.005	0.151
Eigenvalues	2.688	1.840	1.091
% of variance	29.87	20.44	12.12
Cumulative %	29.87	50.31	62.40
Extraction Method: Principal Component Analysis.			
Rotation Method: Varimax with Kaiser Normalization.			
a. Rotation converged in 4 iterations.			

Source: Authors' calculation

In order to estimate the relationship between independent variables (quality, satisfaction and stability) and loyalty as the dependent variable, and the possible influence of control variables on the relationship, hierarchical multiple regressions are conducted (Table 5). This procedure allows specifying a fixed order of entry for variables in order

to control for the effects of covariates, gender, age and income. The regression analysis consists of four models. The first model measures the relationship between independent and dependent variables without any other influence. The second model introduces gender; the third model introduces age and the fourth income.

Table 5 Regression analysis

	Model 1	Model 2	Model 3	Model 4
Quality → Loyalty	0.212	0.197	0.193	0.187
R ²	0.076	0.084	0.115	0.125
R ² change	0.076	0.007	0.031	0.010
Sig. F change	0.001	0.231	0.014	0.148
Satisfaction → Loyalty	0.253	0.225	0.214	0.183
R ²	0.087	0.092	0.116	0.127
R ² change	0.087	0.005	0.021	0.011
Sig. F change	0.000	0.336	0.030	0.131
Satisfaction → Quality	0.090	-0.196	-0.411	0.123
R ²	0.024	0.055	0.056	0.070
R ² change	0.024	0.032	0.001	0.014
Sig. F change	0.118	0.015	0.682	0.107
Stability → Loyalty	0.267	0.396	0.457	0.405
R ²	0.051	0.200	0.219	0.242
R ² change	0.051	0.149	0.019	0.023
Sig. F change	0.023	0.000	0.039	0.023

Source: Authors' calculation

In Table 5 beta coefficients could be observed. If the significance is lower than 0.05 than beta represents a statistically significant unique contribution of the model. Value R² is a percentage of variance explained by the variable. On the other hand, R² change measures the contribution of the variance explained by the control variable included in the model.

5. Discussion and Conclusion

The paper provides empirical evidence to support arguments put forward in the literature review for the inclusion of perceptions of stability along with service quality and satisfaction as drivers in loyalty modelling. Further, the study also supports the proposition that in the banking industry the individual characteristics of the consumers mediate the relationship between drivers of customer loyalty and loyalty itself (Table 6).

Table 6 Results of the survey

H1: Consumer satisfaction has a positive effect on consumer loyalty.	Supported
H2: Service quality has a positive effect on consumer loyalty.	Supported
H3: Service quality has a positive effect on consumer satisfaction.	Not supported
H4: Stability perception has a positive effect on consumer loyalty.	Supported
H5: Gender moderates the relationship between consumer satisfaction and consumer loyalty.	Not supported
H6: Age moderates the relationship between consumer satisfaction and consumer loyalty.	Supported
H7: Income moderates the relationship between consumer satisfaction and consumer loyalty.	Not supported
H8: Gender moderates the relationship between service quality and consumer loyalty.	Not supported
H9: Age moderates the relationship between service quality and consumer loyalty.	Supported
H10: Income moderates the relationship between service quality and consumer loyalty.	Not supported
H11: Gender moderates the relationship between stability perception and consumer loyalty.	Supported
H12: Age moderates the relationship between stability perception and consumer loyalty.	Supported
H13: Income moderates the relationship between stability perception and consumer loyalty.	Supported

Source: Authors

As expected, both consumer satisfaction and service quality have a positive effect on consumer loyalty. These findings correlate with many previous studies (Ndubisi, 2006; Arbore, Busacca, 2009). Satisfaction and quality are recognized as powerful drivers of customer loyalty. The respondents appreciate the accessibility factor of the quality variable. The contemporary way of life imposes resolving problems in a fast manner. So banks near the place of work or near home have more chance to achieve loyalty. Additionally, accessibility of cash machines and parking spots is also an essential tool for gaining loyalty. Reliability is another component of the quality. Some customers like to delegate bank transactions to a personal banker. In such circumstances, it is very important to assure security of personal data as well as mutual confidence. Surprisingly, this study revealed no relationship between satisfaction and quality.

Perception of stability of the banking sector influences loyalty. Unlike Baumann et al. (2017) who investigated just the moderating effect of stability, this study has proven the direct character of influence. The recent financial crisis has shaken the global financial market. Customers began to realise the fragility of the banking system. Croatia was especially affected by the Swiss franc crisis when debtors experienced a sudden simultaneous increase in the exchange rate and interest rates. In volatile conditions consumers are less loyal to the banks because the unstable financial environment threatens their existence.

Age is a moderator in the relationship between satisfaction and loyalty as well as between quality and loyalty. Consumers of an older age don't prefer changing banks. Their behaviour is driven by habit. Older people often have at their disposal less financial resources and therefore have a smaller financial risk. Additionally, such people restrict their bank operations to the minimum (raising cash).

Finally, the research results have shown that gender, age and income moderate the relationship between stability and loyalty. However, the gender influ-

ence is the biggest one. Generally, women are more sensitive to stability issues. The same result can be found in the paper written by Ndubisi (2006) who concluded that women are more loyal than men. The second moderator according to the results is the income. People with higher income are more vulnerable to stability because the risk of loss is greater. They are more persistent to keep and manage their finances.

The paper expands the overall understanding of customer loyalty in bank services by the incorporation of customer perceptions of stability, moving away from modelling customer loyalty grounded primarily on customer satisfaction with service quality. The key finding in this study is that stability perceptions are capable of explaining customer loyalty in retail banking.

Understanding of the predictors of customer loyalty is a key goal for retail bank managers. The majority of the consumers are oriented towards two or more banks, which has been detected in this paper. Building quality products is a certain way of securing a long-term connection with customers. Additionally, decision makers must be aware that bank products are not to be standardized, but tailor made. Not only customer segmentation by age, gender or income is required. The individual approach is slowly becoming a powerful tool for achieving satisfaction.

This study has some limitations, primarily variables and sample size. There are only three independent variables considered in this model: service quality, consumer satisfaction and stability perception. In reality, customer loyalty depends on other factors as well. Switching costs are particularly interesting in the retail bank sector and will be included in the next research. The sample of 187 respondents is slightly below the optimum. For that reason, the reliability test was on the very edge. The authors should put more emphasis on respondents' motivation. Future research involving a larger sample would be favourable to verify this model. However, further research should be pointed towards other relevant factors in other industries like retail or tourism.

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Marija Martinović
Petra Barišić

UTJECAJ INDIVIDUALNE HETEROGENOSTI NA IZGRADNJU LOJALNOSTI POTROŠAČA

SAŽETAK

Lojalnost potrošača je moćan izvor konkurentske prednosti. Menadžeri bi trebali polagati više pozornosti na čimbenike kojima se utječe na poboljšanje dugoročnih odnosa između potrošača i poduzeća. Cilj je istraživanja istražiti prediktore lojalnosti potrošača bankarskih usluga. Pored tradicionalnih prediktora lojalnosti u uslužnom sektoru, zadovoljstva potrošača i kvalitete usluge, istražio se utjecaj percepcije stabilnosti na lojalnost. Drugi je cilj istražiti posredni utjecaj spola, dobi i dohotka na odnos između spomenutih prediktora i lojalnosti. Podatci za analizu percepcije potrošača vezane za zadovoljstvo, kvalitetu, stabilnost te lojalnost prikupljeni su od slučajnog uzorka klijenata banaka u Republici Hrvatskoj. Rezultati potvrđuju da percepcije kvalitete usluge, zadovoljstva i stabilnosti značajno utječu na lojalnost potrošača. Nadalje, dob potrošača utječe na odnos između zadovoljstva i lojalnosti te između kvalitete i lojalnosti. Zahvaljujući posebnosti bankarskoga sektora, spol, dob i dohodak utječu na odnos između percipirane stabilnosti i lojalnosti.

Ključne riječi: konkurentnost, lojalnost potrošača, kvaliteta usluge, zadovoljstvo potrošača

Erik Ružić

Juraj Dobrila University of Pula
Faculty of Economics and Tourism
„Dr. Mijo Mirković”
Preradovićeva 1/1,
52100 Pula, Croatia
erik.ruzic@unipu.hr
Phone: +385989831571

Ružica Bukša Tezzele

Jasne Crnobori 46,
52100 Pula, Croatia
ruzica.buksa@gmail.com
Phone: +385915335168

UDK: 658.811:331.101.262

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International License



Dragan Benazić

Juraj Dobrila University of Pula
Faculty of Economics and Tourism
„Dr. Mijo Mirković”
Preradovićeva 1/1,
52100 Pula, Croatia
dbenazic@unipu.hr
Phone: +38552377052

THE INFLUENCE OF SALES MANAGEMENT CONTROL, SALES MANAGEMENT SUPPORT AND SATISFACTION WITH MANAGER ON SALESPEOPLE'S JOB SATISFACTION

ABSTRACT

Salesperson's job satisfaction is of particular interest to companies because it has been linked to performance and customer retention. Contemporary sales workplace is becoming increasingly complex, but sales managers still, and more than ever, play a significant role in shaping attitudes of their salespeople. Thus, it is important to understand the influence of different sales management practices on salespeople's satisfaction which leads to better personal and organizational results. The main aim of this paper is to explore the influence of three types of sales management control (behavior-based, knowledge-based and outcome-based control), sales management support and satisfaction with sales manager on salespeople's job satisfaction. The research was conducted among salesforce in Croatia and Italy and the data were analyzed by the PLS-SEM method. The study shows that knowledge-based control, manager support and satisfaction with manager positively impact salespeople's job satisfaction. An influence of behavior-based control and outcome-based control was not demonstrated. The findings are partly in line with previous researches, but also provide new insights into aspects of manager-seller relations. The results can help sales managers to shape the target behavior and practices, and make them aware of the importance of their role in achieving job satisfaction among their subordinates. Top and human resource (HR) managers can also hire appropriate managers that can be encouraged to implement desired practices.

Keywords: Salespeople's job satisfaction, sales manager control, sales manager support, satisfaction with sales manager

1. Introduction

Job satisfaction – that is, a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences (Locke, 1976) – is one of the most studied variables in organizational behavior research (Spector, 1997). Several satisfaction theories and models, such as Maslow's Hierarchy of Needs, Herzberg's Two-Factor Theory, Porter and Lawler's Expectancy Theory, Locke's Discrepancy Theory and Range of Affect Theory, Hackman and Oldham's Job Characteristics Model, Bandura's Social Learning Theory, have tried to explain job satisfaction and its influence. Years of extensive research have resulted in job satisfaction being linked to motivation, absenteeism, performance, productivity, successful implementation of corporate strategy, turnover, physical and mental health, stress and general life satisfaction (Thirulogasundaram, Sahu, 2014; Bakotić, 2016; Hulin, 1966; Verbrugge, 1982; Massey Kantak et al., 1992; Riaz et al., 2016).

According to the Sixth European Working Conditions Survey (2016)¹, the average level of job satisfaction in most EU countries is high – 60% of EU citizens were satisfied and 26% were very satisfied with the working conditions in their main paid job in 2015. Denmark and Austria are countries with the most satisfied employees in the EU (with more than 90% satisfied employees, more than 40% of them being very satisfied). On the other hand, Greece and Croatia are countries with the most dissatisfied employees in the EU (with more than 20% of employees being not very satisfied or not at all satisfied). Between these two extremes, Italy shows 82% of satisfied and very satisfied employees, and 18% of not very satisfied and not satisfied at all. As mentioned previously, there are a number of outcomes related to job satisfaction, but at the organizational level, dissatisfied employees result in significant loss for the company as they do not perform at peak level. This is especially true for salespeople, being the primary interface and boundary spanner between the customer and the company (Guenzi et al., 2007), whose peak level performance directly affects sold quantities and the company's income and whose satisfaction positively relates to customer satisfaction (Homburg, Stock, 2005; Schlesinger, Zornitsky, 1991).

Furthermore, the very nature of the sales profession – people-oriented, emotionally demanding (high rejection rate), individualistic, measurable – makes salespeople highly vulnerable to stress and burnout

which negatively impacts their performance and satisfaction (Mulki et al., 2015; Low et al., 2001).

Those who are in a position to directly monitor and affect seller satisfaction are sales managers whose role is irreplaceable. Namely, the overall satisfaction with manager, as well as his/her leadership style (i.e. supportive behavior) and the adopted control mechanism, could help employees to deal with everyday challenges and to feel satisfied at work and by doing this, it could affect the employee sales performance and the overall company's results.

Although many studies have been done on job satisfaction concept, to the best of the authors' knowledge there are no studies that have analyzed the impact of these specific constructs on salespeople's job satisfaction. The goal of this study is to fill this gap through quantitative research among salespeople in Croatia and Italy, and the consequent analysis of the influence of sales management control, support and satisfaction with the superior on salespeople's job satisfaction. The acquired data were analyzed by the PLS-SEM method. A better understanding of the effects of the above relations will make sales managers aware of the importance of their role and will allow them to adjust their control mechanisms, provide adequate support, and work on key issues that contribute to salespeople's job satisfaction. Furthermore, HR managers could benefit from the present research by looking for sales managers with certain personal characteristics (e.g. degree of supportiveness), and by providing them with knowledge on the effects of a particular control strategy on salespeople's satisfaction and understanding of the importance of their role in achieving subordinate's satisfaction.

This paper is composed of five chapters. After the introduction, the second chapter is dedicated to the theoretical background and research hypotheses. The third chapter presents the methodology and the empirical part of the research, as well as the analysis. The discussion and the research implications are presented in the fourth chapter. The last chapter summarizes the most important implications and limitations of the conducted research and provides directions for further research.

2. Theoretical Background and Research Hypotheses

Job satisfaction is positively linked to sales performance (Sahoo et al., 2012; Mulki et al., 2007).

Moreover, salespeople satisfied with their job create long lasting relationships with customers, which is particularly important nowadays when there is high competition in the market and the costs related to loss of loyal customers are high (Lussier, Hartman, 2017).

Taking the foregoing into account, it is important to identify key elements that influence salespeople's job satisfaction. The studies of Raziq and Maulabakhsh (2015) and Özpehlivan and Acar (2015) showed that good working conditions, salary and benefits, co-workers and management skills (such as appropriate management control) play key roles in salespeople's job satisfaction. According to Spector (1997), the most important factors affecting job satisfaction are salary and benefits. The research conducted on nurses employed at private health-care hospitals in Malaysia showed that salary and benefits, organization, social support including co-workers and managerial support, as well as working conditions that support employees' career development, enhance the job satisfaction of nurses (Munir, Rahman, 2016).

Different studies showed that employees' motivation to achieve good performance increases when they have a positive perception of managers, co-workers and company (Raşcă et al., 2008; Dobre, 2013). Moreover, studies suggested that the most important managerial behaviors leading to increased employee satisfaction include enabling employees to make progress in their work and treating them decently as human beings (Amabile, Kramer, 2007).

Drawing on the literature dedicated to job satisfaction, the conceptual framework is composed of three key determinants related to the relationship between managers and employees that influence salespeople's job satisfaction: sales management control, sales management support and satisfaction with sales manager. The hypothesized relationships are discussed herein.

2.1 Management Control and Job Satisfaction

The main purpose of management control is to monitor, evaluate, direct and influence employee behavior in order to achieve the goals of the company. Some studies suggested that salespeople that work under a more visible control system perform better, are more satisfied, and display lower burnout (Cravens et al., 2004; Jaworski et al., 1993).

The theoretical work of Anderson and Oliver (1987) made a significant contribution to the sales force control system literature. They distinguished two different sales force control systems: behavior-based and outcome-based control system. Behavior-based control system involves considerable monitoring of salespeople's activities and results, high levels of supervisor's intervention and direction, and subjective and complex methods of evaluating and compensating performance based on the salesperson's job inputs (e.g. personal qualities, activities, sales strategies). Outcome-based control system implies relatively little monitoring and direction of salespeople, straightforward and objective measures of results (e.g. sales), and use of compensation methods that shift the risk to the salesperson. The main difference between these two control systems is that behavior-based control system addresses the process of selling rather than the outcome.

Considering the nature of the sales job and heterogeneity of the sales task (salespeople often spend a lot of time on the road and success is hard to predict), salespeople are difficult to monitor. Lack of direction in outcome-based control system can enable sales behaviors that harm the company in the long run. In contrast, behavior-based control system allows supervisors to direct salespeople to perform certain behaviors consistent with the company strategy (e.g. devoting some time to planning instead of selling). However, the main disadvantages of behavior-based control system are complexity and subjectivity of the evaluation of salespeople's performance (Adkins, 1979; Behrman, Perreault, 1982). The results of Barker's survey (2015) conducted on Canadian firms revealed that behavior-based control systems might be more appropriate in large companies that require much expertise from their salespeople who are likely to sell sophisticated products and it is important that they build long-term relationships with customers. The study also showed that outcome-based control systems seem to be more appropriate when the emphasis is on short-term results and when salespeople sell simpler products. With regard to job satisfaction, Oliver and Anderson (1994) found that salespeople under behavior-based control systems are more satisfied with their jobs and view their companies as more participative, but they do not perform as well as salespeople in outcome-based control systems. Overreliance on output-based control can reduce supervisory effectiveness and output rewards could

have a negative effect on performance and satisfaction (Oliver, Anderson, 1994; Challagalla, Shervani, 1996).

Today's economy is becoming increasingly knowledge-intensive and salespeople tend to sell knowledge-based solutions to the customers. Therefore, besides the two conventional types of sales control system, this study also takes into consideration the effects of knowledge-based control. Knowledge-based control system implies the extent to which salespeople are evaluated and rewarded for generating and sharing knowledge within salesforce (Matsuo, 2009). It is close to behavior-based control, but the emphasis is on the role of transferable knowledge that salespeople generate. According to Srivastava et al. (2006), knowledge sharing may lead to better team performance by improving decision making. By sharing their knowledge, salespeople create supportive and friendly working environment and a sense of belonging. However, participative cultures are not necessarily more productive, but they often exhibit higher employee satisfaction (Locke et al., 1986).

Considering the research done in the past, sales management control has indirect effects on salespeople's performance, and both direct and indirect effects on job satisfaction. In order to gain comprehensive knowledge of the impact of management control on job satisfaction in today's sales context, all types of control should be taken into consideration. Thus, the following hypotheses were proposed:

H₁: Behavior-based sales management control positively affects job satisfaction

H₂: Knowledge-based sales management control positively affects job satisfaction

H₃: Outcome-based sales management control negatively affects job satisfaction

2.2 Management Support and Job Satisfaction

Job satisfaction is directly linked to burnout, and supervisor support (besides other factors such as positive relations within the organization and family, and job resources) may enhance job satisfaction and reduce burnout (Skaalvik, Skaalvik, 2009). Job satisfaction and burnout are the opposite poles on the same spectrum. According to Eurofound (2015)², 62% of EU employees work to tight deadlines, 59% work at high speed, and nearly a quarter of EU employees have difficulties in getting the job done on

time. These facts highlight employees' predisposition to burnout and job dissatisfaction.

Moreover, people-oriented professions, such as sales profession, are more exposed to emotional exhaustion (the core of burnout and one of its dimensions) because of the high frequency and intensity of interpersonal contact (Jaramillo et al., 2011). Khamisa et al. (2015) examined the relationships between work related stress, burnout, job satisfaction and general health of nurses in South Africa. Poor staff management along with resource inadequacy and security risks in the work place were the main stressors that caused emotional exhaustion and had negative effects on job satisfaction and general health of nurses. Moreover, according to Eurofound (2010)³, the lack of cooperation and support increases the risk of prolonged stress at work and overall dissatisfaction with the job. In their study, Kemp et al. (2013) showed that sales manager support and salespeople's motivation are negatively related to emotional exhaustion and positively associated with fostering a positive working environment. According to Shoemaker (1999), sales managers that support salespeople as much as possible, encourage innovation and risk-taking, communicate and involve salespeople in the vision of the company, involve salespeople in developing sales goals, adhere to the values they espouse and lead by example, positively impact salespeople.

Sales managers are in key position to provide support, as they can provide technical information, task-relevant resources, training and mentoring, but especially emotional support, including encouragement and recognition. These types of support can reduce some of the work-related stressors (House, 1981; Ural, 2008), as well as boost employees' morale and increase the likelihood of their satisfaction (Hartmann et al., 2016; Jaworski, Kohli, 1991).

Today's sales environment is more challenging than ever before, maybe even insecure, and sales managers have a professional and moral duty to care for subordinates' wellbeing and satisfaction.

Based on the above mentioned considerations and with the goal to enhance the knowledge on the relations between manager support and employee satisfaction in the sales field, the following hypothesis was proposed:

H₄: Sales management support positively affects job satisfaction

2.3 Satisfaction with Manager and Job Satisfaction

Salesperson's activity is affected by the constant interplay of perceptions (perceptions of others – perceptions of the manager), emotions and motivations triggered by work itself and the working environment, including workday events and sales manager actions.

Hence, in order to achieve sales objectives and create a positive working environment it is important for sales managers to explore whether there is a direct impact of positive perceptions of the manager on salespeople's satisfaction.

In a study of salespeople conducted by Churchill et al. (1976), more than 40% of the variance in total job satisfaction was explained by climate variables, including satisfaction with sales manager. Moreover, Stringer (2006) claimed that high quality relationships between sales manager and salespeople contribute to a higher level of salespeople's job satisfaction.

The importance of the supervisor as a role model was highlighted by Rich (1997) and Huggins et al. (2016). They stated that salespeople's perception of their manager's role-modeling behavior is positively related to trust in the sales manager and indirectly related to job satisfaction and overall performance of salespeople. Different authors (Jaworski, Kohli, 1991; Amabile, Kramer, 2007) showed that praise and recognition, collaboration, support and enabling to progress impact, among others, salespeople's perception of the manager and their overall job satisfaction. Other authors (Deeter-Schmelz et al., 2008) highlighted that open communication, especially the listening dimension, between managers and salespeople could create a supportive work environment and lead to a positive employee's perception of the manager, thus increasing job satisfaction and productivity.

It can therefore be assumed that when salespeople have a high-quality relationship with their sales manager, they enjoy the benefits of mutual trust, support, effective communication, recognition and esteem, and are hence more likely to be satisfied, in the first instance, with the manager and, secondly, with their job; they will perform better and contribute to the company's prosperity. On the other hand, another beneficiary of these results will be the sales manager itself, who can more easily manage the team and achieve the preset sales goals.

Thus, based on the above mentioned considerations, the following hypothesis was proposed:

H₂: Satisfaction with manager positively affects job satisfaction

3. Methodology

3.1 Scales

A questionnaire composed of 30 questions was developed for the purpose of this survey. The authors used different scales from previous researches in the field. The scale developed by Matsuo (2009) was used to measure the manager control. Manager support was assessed using the scale developed by Lewin and Sager (2008). Satisfaction with manager was measured using the seven-item scale proposed by Goebel, Deeter-Schmelz and Kennedy (2013), while job satisfaction was measured using a scale appropriate to the sales context and established by Netemeyer, Boles, McKee, McMurrian (1997). Demographic questions about the gender, age, educational background and years spent in the enterprise were added to the questionnaire.

The questions and the introduction were written both in Croatian and Italian language. The questionnaire was developed using the LimeSurvey software and it was sent as attachment to an email where the authors explained the purpose of the survey and invited potential respondents to participate.

The seven-point Likert scale (1 = strongly disagree, 7 = strongly agree) was used.

3.2 Sampling

The research sample was chosen by random selection from a list of Croatian and Italian enterprises. The list included active enterprises of all sizes that had more than one employee and annual revenues above HRK 100,000.00 i.e. EUR 13,140.00, and were required to submit their annual financial report for 2015 in Croatia i.e. Italy. The list of enterprises covered all the industries. The questionnaire was aimed at employees in sales roles (salespeople, sales representatives, sales advisors, and the like) within organizations. Finally, a total of 117 valid and fully completed questionnaires were collected. The sample included 44.4% of men and 55.6% of women. The share of respondents younger than 35 years of age was 37.6%, 35.9% of respondents were 36-45 years old, whereas 26.5% of respondents were older than 45 years. 34.2% of respondents were high school graduates, while 65.76% of respondents held a jun-

ior college, higher education or master's degree. 20.51% of respondents worked less than 5 years in the company, 23.93% from 6 to 10 years, 31.62% from 11 to 15 years, whereas 23.93% of respondents worked in the company for more than 15 years.

3.3 Assessment of Measurement Models

The PLS-SEM method was applied to analyze and test the hypotheses, using the SmartPLS 3 software (Ringle et al., 2015)⁴. The PLS-SEM method is more flexible compared to the CB-SEM method as it is a nonparametric method, thus being less sensitive to the distribution of indicator variables, and it allows obtaining acceptable results even with smaller sample sizes (Cassel et al., 1999). Furthermore, the results provided by the PLS-SEM method are considered an approximation as opposed to the CB-SEM

method which pursues accuracy in measuring theoretical constructs. This is why the measurement of theoretical constructs seems more realistic within research in social sciences (Rigdon, 2014). Finally, the PLS-SEM method was chosen because of the purpose of the survey, as it aims primarily at determining the predictive ability of the individual endogenous constructs (Hair et al., 2016). Before the PLS analysis, the indicator variables were checked as to the presence of outliers, and no outliers were identified. After that, a confirmatory factor analysis was conducted to assess the reliability and validity of measurement scales. The statistical significance of item loadings, and subsequently structural coefficients, was determined using bootstrapping procedure with 5,000 subsamples based on recommendations by Hair et al. (2016: 149). The results of the confirmatory factor analysis are shown in Table 1.

Table 1 Indicator of internal consistency, reliability and convergent validity

	Original Sample (O)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	Cronbach α	C.R.	AVE
KBC1 <- KBC	0.761*	0.059	12.982	0.73	0.85	0.65
KBC2 <- KBC	0.897*	0.026	34.269			
KBC3 <- KBC	0.751*	0.056	13.372			
BC1 <- BC	0.775*	0.058	13.416	0.73	0.85	0.65
BC2 <- BC	0.787*	0.048	16.377			
BC4 <- BC	0.846*	0.036	23.817			
OBC1 <- OBC	0.677*	0.257	2.631	0.70	0.82	0.56
OBC2 <- OBC	0.934*	0.222	4.204			
OBC3 <- OBC	0.716*	0.234	3.057			
MS1 <- MSUPPORT	0.858*	0.025	34.373	0.90	0.92	0.71
MS3 <- MSUPPORT	0.832	0.032	26.012			
MS4 <- MSUPPORT	0.855	0.038	22.781			
MS5 <- MSUPPORT	0.788	0.049	15.943			
MS6 <- MSUPPORT	0.864	0.026	32.965			
MSAT1 <- SATMANAGER	0.801	0.051	15.789			
MSAT3 <- SATMANAGER	0.847	0.032	26.134			
MSAT4 <- SATMANAGER	0.916	0.018	50.142			
MSAT5 <- SATMANAGER	0.820	0.035	23.228			
MSAT6 <- SATMANAGER	0.806	0.038	21.428			
MSAT7 <- SATMANAGER	0.826	0.038	21.553			
JS1 <- JOBSAT	0.961	0.009	106.755	0.94	0.96	0.90
JS2 <- JOBSAT	0.943	0.012	76.972			
JS3 <- JOBSAT	0.937	0.017	56.507			

* $p < 0.05$

Source: Authors' calculation

All theoretical constructs are specified as reflective measurement models based on previous research in the field (Matsuo, 2009; Lewin, Sager, 2008; Goebel et al., 2013; Netemeyer et al., 1997). Furthermore, a Confirmatory Tetrad Analysis (CTA - PLS) was conducted, which builds on the concept of tetrads for constructs having more than 3 indicator variables (Gudergan et al., 2008). A tetrad is the difference between the product of one pair of covariances and the product of another pair of covariances (Hair et al., 2016: 286). In reflective measurement models, each tetrad is expected to have a value of zero, which is tested using the CTA – PLS analysis. In this survey, the results of the CTA – PLS analysis showed that none of the tetrads displayed a statistically significant difference from 0, hence it can be assumed that the specification of reflective measurement models is justified in this case. All indicator variables whose item loadings were below 0.4, i.e. whose item loadings ranged between 0.4 and 0.7, were removed from the confirmatory analysis, but their exclusion contributed to an increase in C.R. i.e. AVE indicators above the threshold limit of 0.7 and 0.5 respectively. Accordingly, BC3 indi-

cator variables were removed from the construct Behavioral-based Control (BC), MSUPPORT2 indicator variables from the construct Manager Support, and MSAT2 from the construct Satisfaction with Manager. The remaining item loadings of individual indicator variables were statistically significant at the level of 5% and ranged between 0.4 and 0.7 (OBC1=0.677), i.e. most of them were above the recommended threshold limit of 0.7, thus allowing to establish an acceptable level of item reliability. Moreover, Cronbach α and C.R. coefficients were above 0.7, confirming an acceptable level of internal consistency reliability. Lastly, all AVE indicators of the analyzed theoretical constructs were above 0.5 and ranged between 0.56 and 0.90, thus allowing to establish an acceptable level of convergent validity of the measurement scales.

The conservative Fornell-Larcker criterion (1981) and the Heterotrait-monotrait ratio (HTMT) 95% bias-corrected confidence interval (Table 2) were used to assess the discriminant validity. The HTMT ratio of correlations essentially measures what the actual correlation between constructs would be if they were measured flawlessly (Hair et al., 2016: 118).

Table 2 Fornell-Larcker criterion and HTMT ratio

	BC	JOBSAT	KBC	MSUPPORT	OBC	SATMANAGER
BC	0.803					
JOBSAT	0.537 (0.432-0.795)	0.947				
KBC	0.550 (0.496-0.935)	0.698 (0.699-0.950)	0.805			
MSUPPORT	0.611 (0.546-0.847)	0.796 (0.701-0.976)	0.693 (0.701-0.976)	0.840		
OBC	0.317 (0.197-0.659)	0.192 (0.071-0.413)	0.391 (0.336-0.756)	0.175 (0.101-0.409)	0.784	
SATMANAGER	0.559 (0.433-0.847)	0.766 (0.711-0.901)	0.636 (0.576-0.916)	0.826 (0.836-0.961)	0.123 (0.080-0.273)	0.837

(HTMT 95% bias-corrected confidence interval)

Source: Authors' calculation

According to the Fornell-Larcker criterion, the square root of AVEs for all constructs is greater than the correlation between a given construct and each of other constructs. Likewise, none of the 95% bias-corrected confidence intervals for the HTMT ratio contains a value of 1. Hence, it can be considered that the measurement scales for individual constructs show an acceptable level of discriminant validity.

3.4 Structural Model Analysis

After the evaluation of the reliability and validity of measurement scales, the structural model was analyzed. Given the significance level of 5% and the bias-corrected confidence interval, the hypotheses H2, H4 and H5 were accepted.

Table 3 Structural model analysis

Hypothesis	Original Sample (O)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	R ²	f ²	Q ²	Hypothesis Acceptance
H1: BC -> JOBSAT	0.010	0.071	0.138	0.70	0.00	0.58	Not accepted
H2: KBC -> JOBSAT	0.249	0.085	2.929		0.09		Accepted
H3: OBC -> JOBSAT	-0.011	0.062	0.176		0.00		Not Accepted
H4: MSUPPORT-> JOBSAT	0.381	0.105	3.616		0.12		Accepted
H5: SATMANAGER -> JOBSAT	0.289	0.109	2.637		0.08		Accepted

Source: Authors' calculation

In line with the above, the constructs Behavioral-based Control (H1: $\beta=0.235$) and Outcome-based Control (H3: $\beta=0.01$) do not have a statistically significant impact on Job Satisfaction. Possible reasons for these results are explained in the discussion about the research results. On the other hand, Knowledge-based Control (H2: $\beta=0.249$), Manager Support (H4: $\beta=-0.381$) and Satisfaction with Manager (H5: $\beta=-0.289$) have a positive statistically significant impact on Job Satisfaction. In terms of the effect size of individual exogenous constructs in relation to Job Satisfaction, Knowledge-based Control and Satisfaction with Manager have an effect size of 0.09 and 0.08 respectively, whereas Manager Support has a medium effect size on Job Satisfaction, i.e. $f^2=0.12$. All constructs together explain the substantial 70% of variance of the construct Job Satisfaction i.e. the proposed model has a relatively high level of predictive accuracy. The structural model has a satisfactory level of predictive relevance determined by using the Blindfolding procedure, the value of Q^2 is greater than 0 and equals 0.58. Moreover, the model shows satisfactory quality, the SRMR value is 0.077 i.e. below the threshold value of 0.08 (Hu, Bentler, 1998).

4. Discussion and Implications

In accordance with the researchers' expectations, positive effects of manager support and satisfaction with manager on job satisfaction were proven. With regard to the three components of manager control, the findings show that only knowledge-based control positively affects job satisfaction. Positive effects of behavior-based and negative effects of outcome-based sales control were not demonstrated, which is not in line with the expectations. Taking into ac-

count the low average value of the items connected with behavior-based control, it can be concluded that this type of control is not widely accepted by sales managers in the researched area (Croatia and Italy) and consequently it does not influence salespeople's satisfaction. Moreover, the use of behavior-based control is linked to the type of sold products and the company's size, and these elements were not taken into consideration when the sample was drawn. Lastly, another mediator variable might explain the relations between the two constructs. Regarding non-impact of outcome-based control, it could be assumed that this type of control, being the simplest and most widely used, has become common and expected as part of the sales game and does not influence the perception of job satisfaction or, even more, it positively influences it.

Demonstrated relationships throw new light on certain relationships in the sales context, thus contributing to the theory. Despite job satisfaction being a well-studied construct, the findings demonstrate that there is room for further, deeper investigation, especially on the role of different types of control in sales field.

Based on the findings of this research, sales managers can plan and exert appropriate control (knowledge-based control without any doubt, and even outcome-based control) over sales teams. Moreover, they should support them and underpin activities that will affect the salespeople's perception of the manager in order to achieve greater job satisfaction which will lead to better salesperson's performance and higher company's income (in addition to all other job satisfaction outcomes). Furthermore, top managers and HR managers should plan training programs for sales managers to provide them

with adequate knowledge about the importance and influence of their role, leadership skills and behavior. Lastly, HR managers should hire managers with appropriate attitude towards support, control and relationship with subordinates.

5. Conclusion, Limitations and Future Research

Sales, as the function that concretizes the efforts of all other departments within the company and directly affects the company's success, needs continuous research, especially in today's fast-changing environment. The demanding position of a sales manager has to be nurtured and approached very carefully, bearing in mind the comprehensive impact of the role/position in the company. This study partly contributes to this goal. A sales manager unequivocally needs to be supportive, aware of the importance of his/her role in achieving employee satisfaction and, in particular, careful in exercising appropriate control over subordinates. This is the part of the identikit of a successful sales manager which plays a vital role in the company's achievement.

The research has a few limitations that can serve as a basis for future research of the above relations, relative to the sample and additional moderator variables that can impact the relationships between the investigated constructs. A larger sample and a more heterogeneous structure in terms of the size and activity of companies might yield more reliable and more valid results of the research. Furthermore, due to the available time being limited, the desire to reduce the burden on respondents and little financial resources, variables related to the type of product, the type of market in which products or services are sold, personality traits, characteristics of motivation etc. were omitted, even though as moderator variables they could impact the relationship between the investigated constructs. Lastly, due to the small sample size, the authors did not check the results as to the presence of unobserved heterogeneity. Likewise, the sample included only countries with low and medium degree of employees' satisfaction with working conditions. In the future, it would be recommendable to include countries with high satisfaction level and to differentiate between salespeople in B2B and B2C markets.

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Erik Ružić
Dragan Benazić
Ružica Bukša Tezzele

UTJECAJ KONTROLE MENADŽMENTA PRODAJE, PODRŠKE MENADŽMENTA PRODAJE I ZADOVOLJSTVA MENADŽEROM NA ZADOVOLJSTVO PRODAVAČA POSLOM

SAŽETAK

Prodavačevo zadovoljstvo poslom je od posebne važnosti za poduzeća, s obzirom da utječe na uspješno poslovanje i zadržavanje kupaca. Rad suvremenih prodavača postaje sve složeniji, stoga menadžeri prodaje, više nego ikada prije, igraju značajnu ulogu u oblikovanju njihovih stavova. Važno je stoga razumjeti kako različite prakse upravljanja prodajom utječu na zadovoljstvo prodavača te posljedično na ostvarenje boljih osobnih i organizacijskih rezultata. Glavni cilj ovoga rada je istražiti utjecaj triju vrsta kontrole koje provodi menadžer prodaje (kontrola temeljem ponašanja, kontrola temeljem prenošenja znanja i kontrola temeljem ostvarenih rezultata), podrške prodajnog menadžmenta i zadovoljstva s menadžerom prodaje na zadovoljstvo prodavača njihovim poslom. Istraživanje je provedeno među prodavačima u Republici Hrvatskoj i Italiji, a dobiveni podatci su analizirani pomoću PLS-SEM metode. Rezultati istraživanja pokazuju da kontrola temeljem prenošenja znanja, podrška menadžera i zadovoljstvo menadžerom prodaje, pozitivno utječu na zadovoljstvo poslom kod prodavača. Utjecaj kontrole temeljem ponašanja i kontrole temeljem ostvarenih rezultata nije dokazan. Rezultati su djelomično u skladu s prethodnim istraživanjima, ali također pružaju nove uvide u određena gledišta odnosa menadžer - prodavač. Zaključci istraživanja mogu pomoći menadžerima prodaje u oblikovanju poželjnog ponašanja i primjeni pozitivnih praksi te ih osvijestiti o važnosti njihove uloge u postizanju zadovoljstva njihovih zaposlenika. Također, rezultati istraživanja mogu pripomoći top menadžerima i menadžerima ljudskih potencijala u zapošljavanju menadžera s odgovarajućim karakteristikama koji mogu potom biti dodatno upućeni na korištenje poželjnih praksi.

Ključne riječi: zadovoljstvo prodavača poslom, kontrola menadžera prodaje, podrška menadžera prodaje, zadovoljstvo s menadžerom prodaje

Branka Remenarić
Zagreb School of Economics and
Management (ZSEM)
Jordanovac 110,
10000 Zagreb, Croatia
branka.remenaric@zsem.hr
Phone: +38512354151

Ivana Kenfelja
Zagreb School of Economics and
Management (ZSEM)
Jordanovac 110,
10000 Zagreb, Croatia
ivana.kenfelja@zsem.hr
Phone: +38512354151

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International License



Ivan Čevizović
Čevizović Ivan j.t.d.
Čikoševa ulica 5,
10000 Zagreb, Croatia
ivan.cevizovic@cevizovic.eu
Phone: +385981760476

BINOMIAL MODEL FOR MEASURING EXPECTED CREDIT LOSSES FROM TRADE RECEIVABLES IN NON-FINANCIAL SECTOR ENTITIES

ABSTRACT

In July 2014, the International Accounting Standards Board (IASB) published International Financial Reporting Standard 9 *Financial Instruments* (IFRS 9). This standard introduces an expected credit loss (ECL) impairment model that applies to financial instruments, including trade and lease receivables. IFRS 9 applies to annual periods beginning on or after 1 January 2018 in the European Union member states.

While the main reason for amending the current model was to require major banks to recognize losses in advance of a credit event occurring, this new model also applies to all receivables, including trade receivables, lease receivables, related party loan receivables in non-financial sector entities.

The new impairment model is intended to result in earlier recognition of credit losses. The previous model described in International Accounting Standard 39 *Financial instruments* (IAS 39) was based on incurred losses. One of the major questions now is what models to use to predict expected credit losses in non-financial sector entities. The purpose of this paper is to research the application of the current impairment model, the extent to which the current impairment model can be modified to satisfy new impairment model requirements and the applicability of the binomial model for measuring expected credit losses from accounts receivable.

Keywords: Expected credit loss model, binomial model, IFRS 9, accounts receivable, financial instruments, incurred loss model

1. Introduction

In July 2014, the International Accounting Standards Board (IASB) published International Financial Reporting Standard 9 *Financial Instruments* (IFRS 9).¹ This standard introduces an expected credit loss (ECL) impairment model that applies to financial instruments, including trade and lease receivables. IFRS 9 applies to annual periods beginning on or after 1 January 2018 in the European Union member states.

While the main reason for amending the current model was to require major banks to recognize losses in advance of a credit event occurring, this new model also applies to all receivables, including trade receivables, lease receivables, and related party loan receivables in non-financial sector entities.

The new impairment model is intended to result in earlier recognition of credit losses. The previous model described in International Accounting Standard 39 Financial instruments (IAS 39, 2017)²

was based on incurred losses. One of the major questions for non-financial sector entities is what models to use to predict expected credit losses from trade receivables.

2. Characteristics of Trade Receivables

Entities typically sell products and services on credit rather than requiring immediate cash payment. Such credit sales generate accounts receivables or trade receivables. Trade receivables are financial assets which fall within the scope of International Accounting Standard 39 – Financial Instruments (IAS 39). From 1 January 2018 IAS 39 will be replaced by International Financial Reporting Standard 9 – Financial Instruments (IFRS 9). Trade receivables constitute a significant item on the Statement of Financial Position of entities in trading, manufacturing and non-financial services sectors. Trade receivables shown as percentage of total assets in Croatian entities are given in Table 1:

Table 1 Accounts receivable as % of total assets in 2013 and 2014 in Croatia – cumulative data for 104,470 entities

In mil HRK	2014		2013	
Total assets	1,072,907		1,044,848	
Long term accounts receivables	19,196	2%	18,995	2%
Short term accounts receivables	131,500	12%	129,685	12%

Source: FINA, 2015³

Trade receivables are usually classified as short-term financial assets held at amortized cost. However, trade receivables can be long-term assets. Examples of long-term receivables are lease receivables and contract receivables. Long-term receivables usually contain a significant financing component.

Most businesses have formal accounts receivable policies that dictate when to bill, how much to bill and when to collect. Unfortunately, not all businesses enforce those policies effectively – or even adopt the right processes at all. In many cases, it comes down to culture. Businesses that prioritize sales often fall into the trap of extending credit to customers, offering discounts or ignoring payment terms if it means winning new sales (Deloitte, 2017).⁴

To extend trade credit various processes take place (Milan, Smith, 1992):

- 1) assessment of credit risk of the potential account debtor;
- 2) making credit – granting decision (including setting credit terms);
- 3) financing receivable until maturity;
- 4) collection of receivable;
- 5) bearing default risk.

However, if management does not have a focus on trade receivables management, extending credit terms to customers will impact impairment of the trade receivables.

3. Impairment of Trade Receivables

Trade receivables would be considered impaired if their carrying amount exceeds their recoverable amount. The principle of impairment, set by stand-

ards, is the same for both standards IAS 39 and IFRS 9. However, the procedures in assessing the asset for impairment are quite different. IAS 39 is based on the “incurred loss model” while IFRS 9 is based on the “expected loss model”.

2.1 The Incurred Loss Model

IAS 39 requires all trade receivables to be assessed for impairment. However, the standard adopts different approaches to assessing and calculating impairment for different classification categories (financial assets) but the two most notable characteristics of the IAS 39 impairment model are that (Deloitte, 2017)⁵:

1. Impairment losses should be recognized when they are incurred, rather than as expected; and
2. An impairment loss should be regarded as incurred if, and only if, there is objective evidence of impairment as a result of one or more events that occurred after initial recognition (a ‘loss event’).

IAS 39 requires an assessment, at the end of each reporting period, as to whether there is any objective evidence that a financial asset or group of financial assets is impaired. An asset is considered impaired, and an impairment loss recognized only if such evidence exists.

IAS 39’s insistence on recognizing an impairment loss on receivables only when they are incurred infers the use of an “incurred loss” model in assessing the impairment on receivables. IAS 39 forbids recognizing losses expected as a result of future events, no matter how likely they are. The implication is that an entity must on a continuous basis reassess its ability to collect its receivables and to ascertain if there is objective evidence that a loss event has occurred. Loss events can be considered to be events that crystalize to form objective evidence of impairment; and examples may include significant finan-

cial difficulty of the parties involved; reports of accident on a customer’s major factory, or it becomes probable that the customer will enter bankruptcy (IAS 39, 2017).

According to IAS 39 receivables are tested for impairment individually for receivables that are individually significant and individually or collectively for receivables that are individually insignificant. If an entity determines that no objective evidence of impairment exists for an individually assessed receivable, whether significant or not, it includes the asset in a group of financial assets with similar credit risk characteristics and collectively assesses them for impairment. Assets that are individually assessed for impairment and for which an impairment loss is or continues to be recognized are not included in a collective assessment of impairment (IAS 39, 2017).

The application of IAS 39 provisions on impairment were observed on 10 biggest entities in Croatia according to revenue criteria in 2016. According to IFRS 7 – Financial instruments: Disclosure entities must disclose the following information (the list is not final) (IFRS 7, 2017)⁶:

- The amount of impairment loss.
- Trade receivables age analysis.
- Analysis of trade receivables that are individually determined to be impaired as at the reporting date.
- Factors the entity considered in determining individually impaired trade receivables.

Analysed data were taken from the financial statements publicly announced in the FINA registry for 2016. All observed entities were large entrepreneurs applying International Financial Reporting Standards. Also, financial statements of all entities observed were subject to financial statement audit in 2016 and 2015.

Table 2 Summary of research results on accounting for trade receivables in the biggest Croatian entities according to revenue criteria in 2016

	INA	HEP	Konzum	HT	Pliva	Petrol	Lidl	Plodine	Kaufland	ZGH
Trade receivables/ Sales revenues	10%	15%	2%	10%	14%	8%	1%	2%	1%	7%
Trade receivables/ Total assets	8%	5%	2%	5%	7%	21%	1%	3%	1%	1%
Disclosures according to IFRS 7										
The amount of impairment loss	Disclosed	Disclosed	Disclosed	Disclosed	Disclosed	Disclosed	No impairment	Not disclosed	No impairment	Disclosed
Trade receivables age analysis disclosed in notes	Disclosed	Disclosed	Disclosed	Disclosed	Disclosed	Not disclosed	Disclosed	Not disclosed	Not disclosed	Disclosed
Analysis of trade receivables that are individually determined to be impaired as at the reporting date	Not disclosed	Not disclosed	Not disclosed	Not disclosed	Not disclosed	Not disclosed	Not disclosed	Not disclosed	Not disclosed	Not disclosed
Factors the entity considered in determining individually impaired trade receivables	Not disclosed	Not disclosed	Not disclosed	Disclosed	Disclosed	Not disclosed	Not disclosed	Not disclosed	Not disclosed	Disclosed
Collective impairment criteria	Not disclosed	31-60 days 1,5% 61-90 days 3% 91-180 days 9% 181-365 days 30% over 1 year 90%	120 days	Not disclosed	Not disclosed	Not disclosed	Not disclosed	Not disclosed	61 days	60 days

Source: Authors' research

Research summary - from the above table it can be seen that:

- 9/10 of the entities disclosed information on the amount of the impairment loss;
- 7/10 of the entities disclosed trade receivable aging report;
- 0/10 entities disclosed analysis of the trade receivables that are individually determined to be impaired;
- 3/10 entities disclosed factors they considered in determining individually impaired trade receivables;
- collective impairment criteria are not uniformly used;
- 2/10 entities used 60 days overdue criteria;
- 1/10 entities used 120 days overdue criteria;
- 1/10 entities used multiple overdue criteria;
- 6/10 entities did not disclose this information .

Based on the presented results it can be concluded that the amount of disclosed information on trade receivables impairment is not satisfactory. Qualitative information presented along quantitative information does not allow for the user of financial statements to assess the effectiveness of management of trade receivables. From the results presented it can be concluded that 60% of the entities assess trade receivables for impairment on an individual basis. Only 40% of the entities disclosed information that they use both individual and collective impairment of trade receivables. Factors the entity considers in determining individually impaired trade receivables are disclosed by only 30% of the entities, and those factors are general factors taken from IAS 39, with no detailed description on the applied policy. Several entities disclosed that impairment of trade receivables was done based on management experience.

From the lack of both quantitative and qualitative information in notes to financial statements, it can be concluded that the majority of observed entities do not have a formal policy for accessing trade receivables for impairment, which then leads to the problem of trade receivables information reliability. The results of this research are in accordance with results found in research papers by other authors (Dyhdalewicz, 2012).

Also, from the research it can be seen that the collective impairment criteria is not uniformly used. The majority of entities observed are using the binomial approach: either 61 days as the impairment threshold (2 entities) or 120 days (1 entity) and only one entity uses the provision matrix for impairment of trade receivables. The fact that the majority of entities that are using collective impairment (75%) use 60 days or 120 days overdue threshold of impaired trade receivables might be explained by the influence of the *Croatian Corporate Income Tax Act* which uses the same thresholds (120 days till 2015; 60 days from 2015). Similar results were found in research papers by other authors (Vićentijević, 2015).

3.2 The Expected Loss Model

Under an expected loss model, reporting entities are required to include adjustments to the carrying amounts of trade receivables as credit loss expectations change after inception. It also presumes that the initial carrying amount of receivables reflects the expected credit losses, whether estimated on an individual or portfolio basis. This initial recognition adjustment is consistent with the current IAS 39 requirement to recognize receivables initially at fair value however in practice no adjustment to the nominal amount of trade receivables is generally made.

3.2.1 Major Characteristics of the Expected Loss Model

The expected loss model should incorporate management's estimates based on past and expected future loss events on existing loans.

The development of an expected loss model should be consistent with the following principles (IFRS 9, 2017):

- a) An unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes;
- b) The time value of money; and
- c) Reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions.

The Exposure Draft does not stipulate what an entity should consider when estimating the effect of credit losses on expected cash flows. It does how-

ever give high level guidance that provides that an entity may use various sources of data, which may be internal or external. For example, (IFRS 9 ED)⁷:

- a) Internal or external historical credit loss experience;
- b) Internal or external credit ratings;
- c) External reports and statistics; and
- d) Peer group experience for comparable financial assets (or groups of financial assets).

It is not clear in arriving at management's estimate of expected cash flows whether any particular source would have precedence over another. The reliability of data inputs may also need to be considered in this context. Management should also consider historical loss data and other information related to the financial asset, including the nature of the borrower, the product, the market, the economic outlook etc. However, market data, including implied credit spreads would be considered in management's estimates of future losses. That is, historical data such as credit loss experience should be adjusted on the basis of current observable data in order to reflect the effects of current conditions. Finally, an estimate of expected cash flows needs to take into account the concept of probability. The Exposure Draft requires that the estimates for cash flow inputs are expected values. Hence, estimates of the amounts and timing

of cash flows are the probability-weighted possible outcomes. That is, a probability weighted approach that results in frequent changes in estimates based on both the timing and amount of expected cash flows. A probability-weighted approach is more consistent with the way a market value is calculated and therefore is consistent with how a financial instrument is priced on initial recognition.

It is also noted that expected losses based on probability-weighted possible outcomes only include an estimate of the maximum loss that can be suffered based on what is expected to be lost on average in a time specific horizon and based on historical exposures. The unexpected loss is the portion that exceeds the expected loss. The expected loss will be measured as the standard deviation from the average expected loss within a certain level of probability/confidence (e.g. 95 or 99% of outcomes). The calculation does not incorporate losses outside that level of probability (e.g. such as worst credit loss in over 30 years). Hence the unexpected losses would be covered by equity or prudential provisioning rather than the expected loss model for impairment.

The full IFRS 9 impairment model is based on changes in expected credit losses and involves a three-stage approach. The recognition of impairment (and interest revenue) is summarised in Table 3.

Table 3 Summary of the recognition of impairment (and interest revenue) under IFRS 9

Stage	1 Performing	2 Underperforming	3 Non-Performing
Recognition of impairment	12-month ECL	Lifetime ECL	
Recognition of interest revenue	Effective interest on the gross amount		Effective interest on the net amount

Source: Basford, Leung (2015)⁸

The model includes some operational simplifications for trade receivables, contract assets and lease receivables, because they are often held by entities that do not have sophisticated credit risk management systems. Under the 'simplified' approach, entities with short term trade receivables will recognise 'lifetime expected credit losses' from the first reporting period. These are the credit losses expected over the term of the receivable. As a practical expedient, a provision matrix may be used to estimate ECL for these financial instruments (IFRS 9, 2017).

For trade receivables or contract assets which contain a significant financing component in accordance with IFRS 15 and lease receivables, an entity has an accounting policy choice: either it can apply the simplified approach (that is, to measure the loss allowance at an amount equal to lifetime ECL at initial recognition and throughout its life), or it can apply the general "3 stage" model (IFRS 9, 2017).

Applying the 'simplified' model alleviates some of the operational challenges associated with the 'full' model e.g. assessing whether there has been a sig-

nificant increase in credit risk. However, applying the 'simplified' model will most likely lead to a higher provision than the 'full' model because:

- Under the 'simplified' model, all expected credit losses would be provided for at the first reporting date.
- Under the 'full' model, only a portion (12 months) of credit losses are provided for, (life time expected credit losses are not recognised until there has been a significant increase in credit risk of the receivable under the 'full' model).

Some non-financial services entities do not manage their receivables on a portfolio basis and as a result, it may be difficult to accurately estimate future cash flows on an expected (probability-weighted) basis. Given the reasons stated in the above paragraphs and the short-term nature of receivables, this will be a difficult implementation issue for non-financial services entities (EFRAG & FEA, 2009)⁹.

3.2.2 Comparison of the Expected Loss Model with the Incurred Loss Model

The incurred loss model and the expected loss model report credit losses from different perspectives. The incurred loss model is based on the perspective of allocating a credit loss to the period when that loss is incurred. The expected loss model allocates the initially expected credit loss to the periods when revenue is recognized from the financial asset.

The key difference between the expected loss model and the incurred loss model is when credit losses are recognised. Under the incurred loss model, credit losses are recognised only when those losses have been - incurred, that is, there is evidence that the losses are probable and measurable. Under the expected loss model future expected credit losses form part of an initial determination of the effective interest rate, resulting in expected credit losses being recognised as a reduction of the interest accrual. Additional - impairment adjustments to the carrying amount of the asset are made as future expectations about future credit losses change. This is a continuous re-estimation and does not rely on the - incurred trigger of the incurred loss model. However, immediately after the loss event, the requirements to estimate loss outcomes under the two models are identical and existing systems could

therefore be used to capture impairments from that point (EFRAG & FEA, 2009).

In terms of users of financial statements, the information provided by the expected loss model is generally seen to provide more relevant information since it treats credit loss (impairment) on a consistent basis as revenue recognition. In addition, the results of the model will more closely reflect current economic conditions at the reporting date i.e. it will reflect management expectations at that point in time (EFRAG & FEA, 2009).

However, increased relevance needs to be considered in the context of operational complexity. In assessing whether to adopt the expected loss model for impairment, consideration of whether the operational costs of implementation by preparers is outweighed by the benefits to users would be necessary. Furthermore, the expected loss model results in an increase in the use of management judgement required to calculate the amortized cost of financial assets. Concerns have been raised that an increase in the reliance on management judgement to estimate future cash flow may reduce the reliability of amortized cost information in the financial statements and may make auditing of such information more difficult.

4. Comparison of the Binomial Model and Provision Matrix for Measuring Expected Credit Losses from Trade Receivables

4.1 Provision Matrix

An entity may use practical expedients when measuring expected credit losses if they are consistent with the principles for developing the ECL model. An example of a practical expedient is the calculation of the expected credit losses on trade receivables using a provision matrix. The entity would use its historical credit loss experience for trade receivables to estimate the lifetime expected credit losses on the financial assets as relevant. However, an entity shall adjust historical data, such as credit loss experience, on the basis of current observable data to reflect the effects of the current conditions and its forecasts of future conditions that did not affect the period on which the historical data is based, and to remove the effects of the conditions in the historical period that are not relevant to the future contractual cash flows.

A provision matrix might, for example, specify fixed provision rates depending on the number of days that a trade receivable is past due (for example, 1 per cent if not past due, 2 per cent if less than 30 days past due, 3 per cent if more than 30 days but less than 90 days past due, 20 per cent if 90 - 180 days past due etc.). Depending on the diversity of its customer base, the entity would use appropriate groupings if its historical credit loss experience shows significantly different loss patterns for different customer segments. Examples of criteria that might be used to group assets include geographical region, product type, customer rating, collateral or trade credit insurance and type of customer (such as wholesale or retail).

Table 4 Provision matrix based on aging of the trade receivables

Aging of the trade receivables	Expected default rate
Not past due	1%
1-30 days past due	5%
31-60 days past due	25%
61-90 days past due	50%
More than 91 days past due	75%

Source: Authors' proposal according to IFRS 9, 2017

Given the results of the research on the application of the impairment provisions of IAS 39, the majority of the entities are not able to apply this (practical expedient) approach to trade receivables impairment without considerable effort and time spent to identify aging groups of trade receivables and related expected default rates, since currently they are using the binary approach to trade receivables impairment (60 or 120 days). As research has shown, the majority of entities commonly use individual impairment based on management historical experience and expectations. Collective impairment is usually based on one overdue threshold (60 or 120 days). That indicates, that entities would have to adjust their current impairment models significantly to apply this practical expedient.

3.2 The Binomial Model

The binomial model assumes that the debtor (trade receivable) will either default or will remain in its current credit quality. This approach assumes no transition in credit quality. The binomial model assumes that movements in the credit quality follow a binomial distribution, for many trials, this binomial distribution approaches the lognormal distribution.

The probability of default under this model is developed based on 1-year probability of default rate.

The cumulative distribution function can be expressed as:

$$F(k; n, p) = \Pr(X \leq k) = \sum_{i=0}^{\lfloor k \rfloor} \binom{n}{i} p^i (1-p)^{n-i}$$

where:

$\lfloor k \rfloor$, is the "floor" under k, i.e. the greatest integer less than or equal to k.

n, number of years

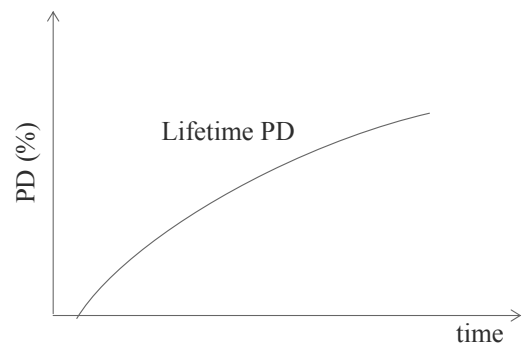
p, probability of default

Therefore,

Lifetime probability of default for financial instrument with 3-year maturity

$$= PD_1 + (1 - PD_1) \times PD_1 + (1 - PD_1)^2 \times PD_1$$

Figure 1 Lifetime PD



Source: Authors

Because trade receivables are mostly short-term assets, it is necessary to adjust the general model to reflect the short-term nature of these assets. That

means it is important to redefine parameter n as the number of months, while the other variables of the binomial function remain the same as in the general model. Probability of default (PD) for one year can be approximated by calculating the average portion of uncollected receivables in the last few years in total credit sales (e.g. last 5 years). Furthermore, the annual average PD is then divided by 12 months to approximate monthly PD. Then, this approximated monthly PD based on historical data is adjusted for current conditions and forecasts of future economic conditions.

The advantage of this model is simplicity, and availability of data needed to determine probability of default. The calculated probability of default can be used for the total portfolio of receivables which make it simple to implement. Also, this model is statistically verifiable which is an important factor to assure neutrality of financial information as a qualitative characteristic of financial statements.

5. Conclusion

The aim of this paper was to research the applicability of the binomial model for measuring expected

credit losses from trade receivables in non-financial sector entities. For that purpose, an analysis of the current situation was performed in ten biggest entities in Croatia based on revenue criteria in 2016. The research results showed that the majority of the entities observed use only the individual impairment approach. The ones that use collective impairment of trade receivables dominantly use the binomial approach. Only one entity uses the provision matrix for collective impairment of trade receivables. The IFRS 9 offers simplification for trade receivables regarding measurement and recognition of lifetime expected credit losses and use of the practical expedient "provision matrix" for measuring impairment loss from trade receivables. Given the results of the research, it can be concluded that entities would benefit from the use of the binomial model for measuring impairment losses since they would have to make fewer adjustments of their current impairment model to the binomial model than to the provision matrix model. Future research should be focused on the entities' adoption of the new model introduced by IFRS 9. Also, investigation should include potential improvement in the quality of information presented in financial statements.

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*Branka Remenarić
Ivan Čevizović
Ivana Kenfelja*

BINOMNI MODEL ZA MJERENJE OČEKIVANIH KREDITNIH GUBITAKA POTRAŽIVANJA OD KUPACA U SUBJEKTIMA NEFINANCIJSKOGA SEKTORA

SAŽETAK

U srpnju 2014. godine Odbor za Međunarodne računovodstvene standarde (IASB) objavio je Međunarodni standard financijskoga izvještavanja 9 - Financijski instrumenti (MSFI 9). Ovaj standard se temelji na pristupu očekivanih kreditnih gubitaka (ECL) kod utvrđivanja umanjenja vrijednosti financijskih instrumenta, uključujući potraživanja od kupaca i najmove. MSFI 9 primjenjuje se na izvještajna razdoblja koja započinju na dan ili nakon 1. siječnja 2018. u državama članicama Europske unije.

Iako je glavni razlog promjene modela utvrđivanja umanjenja vrijednosti financijskih instrumenta bio da banke priznaju gubitke od umanjenja prije nego li se dogodi događaj koji umanjuje vrijednost instrumenta, novi se model jednako odnosi i na sva potraživanja, uključujući potraživanja od kupaca, potraživanja za najmove, potraživanja po zajmovima povezanim subjektima u subjektima nefinancijskoga sektora.

Novi model utvrđivanja umanjenja vrijednosti rezultat će ranijim priznavanjem kreditnih gubitaka. Prethodni model opisan u Međunarodnom računovodstvenom standardu 39 Financijski instrumenti (MRS 39), temelji se na nastalim gubitcima. Jedno od glavnih pitanja je kako predvidjeti očekivane kreditne gubitke u subjektima nefinancijskog sektora. Svrha ovog rada je istražiti primjenu postojećega modela umanjenja potraživanja od kupaca, procijeniti mogućnost modifikacije postojećeg modela kako bi se zadovoljili zahtjevi novog modela te primjenjivost binomnog modela za mjerenje očekivanih kreditnih gubitaka potraživanja od kupaca.

Ključne riječi: model očekivanih kreditnih gubitaka, binomni model, MSFI 9, potraživanja od kupaca, financijski instrumenti, model nastalih gubitaka

Ezeni Brzovska
Ss. Cyril and Methodius
University in Skopje
Faculty of Economics
Bldv. Goce Delcev 9V,
1000 Skopje, Macedonia
ezeni@ecf.ukim.edu.mk
Phone: +38923286834

Ivana Simjanovska
Macedonia Experience
Nikola Kljusev 3,
1000 Skopje, Macedonia
simjanovskai@gmail.com
Phone: +38970578048

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Đurdana Ozretić Došen
University of Zagreb
Faculty of Economics & Business
Trg J.F. Kennedyja 6,
31000 Zagreb, Croatia
dozretic@efzg.hr
Phone: +38512383463

THE IMPORTANCE OF DIFFERENT DIMENSIONS IN THE EXPERIENTIAL BASED MODEL AMONG WINE TOURISTS AND WINE INDUSTRY EXPERTS IN THE REPUBLIC OF MACEDONIA

ABSTRACT

Wine tourism is facing new challenges where tourists are in search of extraordinary, unique and memorable experiences, which require from individual wine operators to develop a distinct, engaging and value-added offering. The latest research suggests the need for a more holistic approach to the experiential nature of wine tourism. The present study utilizes relevant constructs of the experience economy model to reveal the importance of each dimension among visitors of major wineries in the Republic of Macedonia. Wine industry experts have ranked the importance and performance of pertinent attributes as key success factors for visiting a winery. The purpose of the paper is to analyze whether the 4E construct is of equal importance to tourists' evaluations of the wine tourism experience. The survey results reveal that, according to the experts' opinions, human resources, information and signage, and landscaping are the essential success factors for visiting the winery. The esthetic dimension appeared to be the dominant dimension of the experiential outcomes among wine tourists. Findings from the wine tourism research, within the experience economy model, might be beneficial for all the involved parties in wine tourism to improve their wine tourism offer to experience-seeking visitors.

Keywords: Experience economy, wineries, wine tourism, tourist's experience

1. Introduction

Wine tourism is a growing industry which can have a major impact on the identity of the regions in which it takes place. It consists of cultural, economic and historical values and has become a key component and a pillar in the strategies of diversification of many destinations. Furthermore, wine tourism constitutes a major driver in diversification strategies helping destinations to enrich their offer and to attract different segments. Wine tourism is a growing segment in a continuous update that offers an extraordinary diversity to the consumer as well as business opportunities to producers.¹ The wine industry in the Republic of Macedonia is in its infancy and consequently, needs nurturing. In 2011 there were 80 registered Macedonian wineries, but in just five years, only two-thirds continue to trade. Macedonian wineries, comprised of the large, well-funded commercial players and the small, 'boutique' wineries, face the challenges of operating on a small market such as the Macedonian.² Wine tourism, although still in its early phase in Macedonia, is a growing tourist attraction. Besides the need to turn to foreign markets for selling Macedonian wines, there is an opportunity (with proper implementation of marketing strategies), to position the country as a desired wine tourism destination that provides a unique experience for visitors. The visitor's experience becomes a significant element of the marketing strategy for many wineries. Wine tourists want to immerse themselves in the culture of wine-making, vertical wine tasting, entertaining activities and consequently, wineries have been striving to provide authentic experiences. This new demand for unique and memorable experiences requires from wine operators to create value-added offers for achieving competitive advantage.

The experience economy has recently emerged as a relevant framework for understanding how to improve wine tourism. Quadri-Felitti and Fiore (2012) emphasize the need for examining different items of the holistic wine tourism experience regarding their contribution and importance in the process of evaluation of the experience. The empirical part of this paper examines the importance of different items of all four experience economy realms among wine visitors in major wineries in the Republic of

Macedonia. Wine experts and consultants ranked the importance and performance of key success factors of the experience of the major wineries.

2. Literature Review

Wine tourism as an emerging concept is becoming increasingly significant for wine regions and wineries (Hall et al., 2000). The literature provides a variety of definitions of wine tourism with a different focus. Thus, wine tourism can be defined as visitation to vineyards, wineries, wine festivals and wine shows for which wine tasting and/or experiencing the attributes of a grape wine region are the prime motivating factors for visitors (Hall, 1996; Macionis, 1996). Wine tourism is based on a special interest in wine motivated by the destination (wine region), the activity (wine tasting) or both (Cambourne et al., 2000). Arguing that the motivations and expectations of wine tourists can be quite diverse, Johnson (1998, as cited in Hall et al., 2000: 5) broadens the definition of wine tourism as "visitation to vineyards, wineries, wine festivals and wine shows for the purpose of recreation." Geißler (2007, as cited in Pikkemaat, 2009) expanded the definition including a wide range of experiences, built around visitation to wineries, wine regions or wine-related events and shows. They include wine tasting, wine and food, the enjoyment of the regional environs, day trips or longer-term recreation, and the experience of a range of cultural and lifestyle activities. Consequently, wine tourism becomes a tourism activity influenced by the physical, social and cultural dimensions of the winescape and its components (Cambourne et al., 2000). The wine tourism product is complex, and it comprises of different activities, services and benefits that constitute experiences (Medlick, Middleton, 1973). Thus, wine tourism should provide a unique experience which includes wine, gastronomy, culture, arts, education, and travel or a combination of the ambiance, atmosphere, surrounding environment, regional culture and cuisine, local wine styles and varieties (Williams, 2001). The definition of wine tourism by Van Westering (1999) focuses mainly on the attractions of the wine region such as heritage, landscape and the wine made. Festivals, socializing, the Winemaker's Day and entertainment are suggested as the motivation of

wine tourists (Macionis, Cambourne, 1998). Dodd (1995: 5) comments that wine tourism is associated with “relaxation, communing with others, learning about new things and hospitality.” Besides the diversity in describing wine tourism, most of the stated definitions posit that wine tourism involves more than just visiting wineries and purchasing wine. Stamboulis and Skayannis (2003) suggest that stored knowledge from interaction with tourists integrated into intelligence could be a source of competitive advantage. “Wine tourism is a multi-faceted and complex phenomenon, and provision of a quality tourism experience depends on satisfying tourists’ needs at the regional and activity place scales, while maintaining environmental integrity” (Carmichael, 2005: 201). Wine tourism expands its activity by developing new offers. As part of the holistic offers wineries start to incorporate wine festivals, wine shows, wine tasting, food, the enjoyment of the regional environs, day trips or longer-term recreation, the experience of a range of cultural and lifestyle activities, the arts, an educational atmosphere, surrounding environment. In the future, wine tourists will increasingly become travelers seeking educative and experiential components (Cambourne et al., 2000; Carmichael, 2005). The experience, comprised of unique activities, is emphasized in many definitions which prove the emerged interest for the wine tourism experience. Wineries actively sought to understand and fulfill the needs, motivations and increasing requirements of wine tourists for experiencing creative activities.

The experience economy as an emerging concept is implemented across a wide range of industries, including wine tourism. Pine and Gilmore (2000) describe and explain the progression of economic value and define the experience as a distinct economic offer built on top of services, goods, and commodities. The present study utilizes pertinent constructs of the experience economy model to explore the importance of different items for visiting wineries. Pine and Gilmore (1998) identify four dimensions of consumer experiences divided by the degree of customer participation and connection within the performance. The four types of experiences are entertainment, educational, escapist and esthetic. The educational and escapist dimensions reflect active participation, whereas the entertainment and

esthetic dimensions are characterized by the passive participation of the customer, in this case, the wine tourist. Consequently, during the educational and escapist experience, the tourist will directly affect or influence the performance of the winery. On the other hand, winery visitors are immersed in the esthetic or escapist experiences; they absorb entertaining and educational offerings in wineries.

Each dimension in the experience economy framework engages individual customers in a way that creates a memorable and perception-changing experience. The esthetic dimension occurs when wine tourists are immersed passively in the experience, specifically when they are indulged in sensorial environments. The esthetic dimension refers to visitors’ interpretation of the physical environment around them. Many authors highlight that winescape is vital to the wine tourism experience (Alant, Bruwer, 2004; Carmichael, 2005; Williams, 2001). Educational experiences engage the mind of the consumers and play a vital role in co-determining their experience. Visitors enhance their knowledge during the winery visit. Previous research suggests that the educational opportunities at the winery are especially important to about one-third of the visitors (Charters, Ali-Knight, 2000) and wineries should focus on them in detail. Education has been pointed out as a motivation in the wine tourism research literature (Fountain, Charters, 2010; Getz, Carlsen, 2008). Visitors manifest the need to learn more about wine; they rank this motive among top three for visiting the winery (Bruwer, Alant, 2009). Macedonian wineries strongly support the education of their customers with respect to the grapes, processes, tastes, characteristics, and some interesting curiosities worth knowing. They also organize special seminars that cover the most relevant wine topics and issues (Simjanovska, Caputo, 2015). Escapism experiences occur when wine tourists are actively immersed in the experience, and it requires their participation. The participatory, immersive activities were part of different models as factors that help to predict tourist behavioral intentions (Fountain, Charters, 2010). The entertaining experience is located in the passive-absorption quadrant and consumers are engaged by a different type of performances. Special events organized in wine destinations entice tourists’ attention and enhance their entertainment experi-

ence (Carmichael, 2005; Williams, Kelly, 2001). Many wine-related events are organized in the Republic of Macedonia, such as the Tikvesh Grapevine Harvest and the wine festival VINO Skopje. The Tikvesh Grapevine Harvest is an event traditionally celebrated during the harvest season in the town of Kavadarci, located in the Tikves wine district. The wine festival VINO Skopje takes place in the city of Skopje, usually at the beginning of October with the presence of many Macedonian wineries (Simjanovska, Caputo, 2015).

Due to the rising interest for the tourist experience, a plethora of studies have used theories of hedonic and experiential consumer behavior to understand aspects of wine tourism (Bruwer, Alant, 2009; Getz, Carlsen, 2008; Williams, 2006). Jurowski (2009) proves that different dimensions of tourist participation in specified activities can be grouped in four realms of the experience economy model. However, studies that have used the experience economy framework to research wine tourism remain scarce (e.g., Ali-Knight, Carlsen, 2003; Pikkemaat et al., 2009; Quadri-Felitti, Fiore, 2012; Quadri-Felitti, Fiore, 2013).

Ali-Knight and Carlsen (2003) emphasize the necessity for creating a memorable and compelling experience in the wine industry. Therefore, the winery operator must provide a memorable and sensory experience, which will have enduring novelty, and the visitor will be engaged and entertained through different targeted events and will be offered unrivaled sampling opportunities. The article was criticized due to lack of aligning the suggested activities within the 4Es framework (Quadri-Felitti, Fiore, 2012). Pikkemaat et al. (2009) applied the experience setting model to measure the potential of experience-orientation of South Tyrolean wine routes. They emphasize the necessity to create multi-optional attractions and to stage experiences for wine tourists. The four dimensions of the experience realm of Pine and Gilmore were employed for analyzing the expectations and the degree of visitors' satisfaction. Results have indicated that the esthetic dimension, such as the landscape and information about wine, is the most significant regarding visitors' expectations and satisfaction. In terms of expectation, education was noted as the least important dimension, while escape was

ranked as the lowest concerning visitors' satisfaction. Each dimension of the 4Es was comprised of three items which did not fully capture the constructs. The authors excluded outdoor architecture in measuring the esthetic dimension and did not provide clear distinguishing features for all the items (Quadri-Felitti; Fiore, 2012).

Very few studies empirically tested the 4Es and expanded understanding of the experience economy by examining how tourists' memories operate together with the 4Es and whether satisfaction has influence on their destination loyalty in different tourism settings (Quadri-Felitti, Fiore, 2013; Hosany, Witham, 2010; Oh et al., 2007). The four realms of experience offer not only a conceptual but also a practical measurement framework for analyzing the tourist experience. Quadri-Felitti and Fiore (2013) measured the experience economy's 4Es by adapting Oh et al.'s (2007) validated 16-item scale and structural equation modeling. The results demonstrate the supremacy of the esthetic experience in predicting positive memories and destination loyalty in the wine tourism context. Hosany and Witham (2010) have employed the four dimensions for understanding cruisers' onboard experiences. Esthetics has appeared to be a dominant determinant in predicting satisfaction and intention to recommend. Oh et al. (2007) constructed a measurement scale and they empirically tested the experience economy conceptual model using customers' lodging experiences with bed-and-breakfasts, and the results have proved that the esthetic dimension was the main determinant of the experiential outcomes.

Wine tourists look for diversity of activities during their visit at wineries. Exploring the main motives as the key success factor for visiting a winery is of high importance for all the wine operators. Demand for wine tourism comprises motivations, perceptions, previous experiences and expectations of the wine tourist. A small number of wine tourists desire to purchase wine as the only reason for visiting a winery. Visitors seek for a unique experience among top three reasons in their decision to visit the winery region, after the desire for rest and relaxation in an attractive landscape (Carmichael, 2005). Getz and Carlsen (2008) suggest that wine visitors preferred friendliness, diversity of activities, attractive

scenery, knowledgeable staff and group tours as the main reasons for visiting a winery.

3. Methodology

Two market research methods, expert evaluation, and winery visitors' survey were applied for data collection in this study, in the period from February to April 2017.

For the purpose of examining the key success factors for visitors' experience, seventeen wine industry experts were asked to rank the importance and performance of different attributes (after winery visit), on the seven-point Likert scale (ranging from 1 = not important to 7 = very important). The main reason to use a seven-point scale was to increase the variance in measures since a seven-point scale enables to get more data, which is helpful in the situation with a low sample size (17 experts). The attributes that wine industry experts rated were: human resources, information and signage, landscaping, experiences for all senses, diversity and choice of activities, events, possibilities for unique accommodation, the theme and educational dimension.

The survey of wineries' visitors (based on previous researches of Quadri-Felitti, Fiore, 2012; Pikkemaat et al., 2009; Carmichael, 2005) was undertaken in order to examine the importance of different items of 4Es of the experience model and to gain a better understanding of wine tourism demand among winery visitors in the Republic of Macedonia. The items in the structured questionnaire were categorized according to Quadri-Felitti and Fiore (2012), while wine tourist activities were based on the four dimensions of the experience realm of Pine and Gilmore (1999), i.e., entertainment, education, escape, and esthetics. The conceptual and practical relevance of the experience based model for the tourism industry is evident, but there are still very few academic papers, mainly due to the absence of validated empirical measurement scales (Oh et al., 2007). Consequently, the applicability of the experience based model is limited. In previous research, e.g., for the evaluation of success factors of the wine routes authors employed a 6-point Likert scale; others posed the 4Es items on a 7-point Likert scale (Pikkemaat et al., 2009; Quadri-Felitti, Fiore, 2013;

Carmichael, 2005). In this research of wine tourists' experiences, the measurement scale for measuring 16-items was used. A five-point Likert scale (ranging from 1 = low importance to 5 = high importance) was applied, as a commonly used approach, because of its comprehensibility for respondents and easiness to express their views (Marton-Williams, 1984).

There are no official data about the number of visitors to Macedonian wineries. The wineries Kartal, Chateau Kamnik, Brzanov, Chateau Sopot, Tikves, Popova Kula, Stobi, Popov, Bovin and Pivka, which offer wine tourism activities (wine tasting room, accommodation, wine service, etc.) participated in the research. The research was conducted on a convenience sample of visitors. The official tourist guide selected the visitors after they visited the certain winery. The questionnaire was sent by email to each of the visitors from the sample, and they were asked to complete and return it. In two months, from February until April 2017, 33 usable questionnaires were collected.

3.1 Expert Evaluation

Half of the wine industry experts were from Macedonia; the others were from Serbia, Croatia, the USA, England, Australia, Bulgaria, Hong Kong and Germany. The sample included persons with different careers in the field. Among them, there were authors of contributions and/or editors of wine-related magazines, international wine judges, a writer of a wine-related book, owners and managers at wineries and tourist agencies, a consultant at the Agency for Promotion and Development of Tourism in Macedonia, coordinators and a director at wine operators (wine digital marketing agency, wine contests, and alike), associate professor from the faculty of tourism and hospitality.

Wine industry experts were asked to rank the level of importance and performance of winery features on a seven-point Likert Scale. First, experts evaluated factors they perceive as key success variables for visiting a winery. They ranked the importance of human resources (6.24), information and signage (5.94) and landscaping (5.59) as three main key success factors for a winery visit (see Table 1). Then, they rated the performance of the each of all respective attributes.

Table 1 Success factors for visiting wineries in the Republic of Macedonia among wine industry experts

Description of wineries' attributes	Mean rating of importance	Mean rating of performance for Macedonian wineries
Human resources - skilled, multi-lingual, friendly and knowledgeable about wine and local culture, uniform dress	6.24	4.53
Information and signage - clear communication, large letters, ease of access	5.94	3.18
Landscaping - rural landscape, local architecture, ecological development and landscape maintenance, reduction of traffic	5.59	4.18
Experiences for all senses - Wine cellars, food demonstration, tasting, cellar concert, wine weeks	5.53	4.00
Diversity and choice of activities - vineyard hiking, harvesting grape, guided tours, wine route, personal services, storytelling	5.12	3.29
Events - Wine festivals, special events	5.06	3.59
Possibilities for unique accommodation	5.00	3.18
The theme - Overall concept, corporate design and signage in all destinations, attractiveness of winery buildings, attractive scenery	4.88	3.82
Educational - wine tasting and seminars, winemaking seminars, cooking and craft making classes	4.88	3.18

Importance - on a scale from 1 to 7, where 1 is not very important, and 7 is very important.

Performance - on a scale from 1 to 7, where 1 is very poor, and 7 is excellent.

Source: Authors' calculations

The results support the previous findings that infrastructure and management are of the greatest importance for the success of wine regions (Pikkemaat et al., 2009). Also, they are in line with the findings of research of Getz and Carlsen (2008), where wine industry professionals highlighted wine route signposting as the most significant. Furthermore, landscape together with people and hospitality were rated as the most important regional characteristics for wine visitors (Bruwer, Alant, 2009). Contrary to Carmichael's (2005) findings, which showed the higher performance of attributes in comparison with their importance (for all variables except signage), in this study, performance was rated lower compared to importance for all the attributes. Table 1 shows that the greatest gap was found in the attribute "information and signage - clear communication, large letters, and ease of access." The gap which exists between mean values of importance (5.94) and performance (3.18) for this attribute indicates a need for change. Wine experts noted that the inconsistently designed and poor signage of wineries creates a poor user experience. Another interesting aspect is the evaluation of the performance of human resources (4.53), as an attribute that most wine experts are satisfied with. Hence, the wine industry

experts are pleased with the employee involvement, knowledge, hospitality and visual appearance.

3.2 Wine Visitor's Survey

In terms of demographics, the sample included a diversity of age groups, as follows: 8 of the respondents were between 25 and 34 years old, 15 between 35 and 44 years old, 5 were between 45 and 54 years old, 4 were between 55 and 64 years old and one respondent was 65 or older. Slightly more than half of all respondents were male (18), against 15 women. Most of the respondents were from Macedonia (7), followed by those from the US (5), Belgium and Italy (3), Slovakia, the Netherlands and Germany (2) and one respondent from Australia, Austria, Serbia, Estonia, Poland, Japan, Singapore, the UK, and Ukraine. The majority (11) of respondents spend between 201 – 400 EUR monthly on wine. 9 respondents spend between 101 – 200 EUR, 5 respondents between 50 – 100 EUR, 3 between 401 – 800 EUR, 3 less than 50 EUR, 2 respondents spend 801 EUR or above. Most of the respondents (17) stated that they are genuine wine lovers, 8 respondents declare good wine knowledge, 4 respondents have average knowledge and 4 identified themselves as wine experts. Regarding the level of education, 18 respond-

ents have a master's degree, 11 a bachelor's degree, 2 have a doctoral degree and 2 respondents finished high school. According to 29 respondents, a referral from friends and family, and wine and tourist guides were the most important information source about the Macedonian wineries. The other 4 respondents got information about Macedonian wineries from the Internet.

Wine visitors were asked to evaluate the importance of 4Es using the experience-based model developed by Pine and Gilmore (1999). Each item was defined according to the Quadri-Felitti and Fiore (2012) listing of wine tourism activities, categorized by the 4Es, and adapted according to the wineries' specifics in the Republic of Macedonia and information gained through interviews with wine industry experts. Therefore, the esthetic dimension was comprised of: the impact of the winescape on the overall experience, good accommodation at the winery or in the vicinity of a winery, driving rural roads lined with vineyards, well designed signage and information for making it easy for visitors to find a winery and appropriate stemware such as good wine glasses, decanters etc. An array of activities at the winery such as vineyard hiking or cycling tours and the option to participate during harvest season as a grape picker were part of the escapist dimension.

Education consisted of vertical wine tasting available at a winery, home winemaking seminars, cooking and craft making classes, wine seminars available at the winery/wineries, food, and wine pairing. The fourth realm, entertaining, incorporated: food demonstration available at a winery, a wide range of amusement activities for children, wine events such as harvest parties, wine celebration days, open wine days at a winery, wine museums and heritage site visits in the vicinity of the winery, and wine service available at a winery (sommelier, wine waiter, wine guide). Wine visitors rated the importance of different items when visiting a winery and the services provided there, on a scale of 1 to 5, where 1 was low importance, and 5 was high importance.

Table 2 indicates that esthetics was the most important experience dimension for visiting a winery while escapism was stated to be the most unimportant dimension. Mean scores were highest for items: appropriate stemware such as good wine glasses, decanters etc. (4.30), wine service available at a winery (sommelier, wine waiter, wine guide) (4.03), signage and information on the wine route on how to reach the winery (4.00), the impact of the winescape on the overall experience (3.90) and vertical wine tasting available at a winery (3.87).

Table 2 Tourists' evaluation of wine experiences across major Macedonian wineries

Experiences	Items	Mean evaluation
Esthetic	Appropriate stemware such as good wine glasses, decanters, etc.	4.30
	Signage and information on the wine route on how to reach the winery	4.00
	The impact of the winescape on the overall experience	3.90
	Good accommodation at the winery or in the vicinity of a winery	3.67
	Driving rural roads lined with vineyards	3.23
Education	Vertical wine tasting available at a winery	3.87
	Food and wine pairing	3.43
	Wine seminars available at the winery/wineries	3.40
	Cooking and craft making classes	2.63
Escapist	The option to participate during harvest season as a grape picker	3.30
	An array of activities at the winery such as vineyard hiking or cycling tours	3.00
Entertaining	Wine service available at a winery (sommelier, wine waiter, wine guide)	4.03
	Wine events such as harvest parties, wine celebration days, open wine days at a winery	3.83
	Food demonstration available at a winery	3.13
	Wine museums and heritage site visits in the vicinity of the winery	2.77
	Wide range of amusement activities for children	2.27

Evaluation on a scale of 1 to 5 where 1 is low importance and 5 is high importance

Source: Authors' calculations

Having a closer look reveals that three of the top five stated items are part of the esthetic dimension in the experience economy model, which underlines the significance of the indoor and outdoor esthetic experience. These findings are consistent with the results of other studies (Tempesta et al., 2010; Pikkemmat, 2009; Carmichael, 2005; Ali-Knight, Charters, 2001). Wine visitors are immersed in esthetic stimuli which certainly has an important emotional value and “the effect on the perception of the wine’s sensory quality proved to be so significant that it leaves little doubt as to its importance for the development and promotion of wine products” (Tempesta et al., 2010: 835). Also, the results corroborate previous findings that an attractive landscape and the setting of the winery are powerful and influential attributes of the wine touring experience (Carmichael, 2005; Ali-Knight, Charters, 2001).

4. Conclusion

Wine tourism as a growing segment is facing intense competition and more demanding consumers; by employing educational, entertainment, esthetic and escapist experiences, improved and unique wine offerings can be created.

Wine tourists want more from the wineries than just to purchase wines. They desire a unique experience and memorable moments. Experience providers, i.e., wineries, must constantly refresh their experiences - change or add elements that keep the offering new, exciting and more relevant to the wants and needs of individual customers, and worth paying money to experience all over again (Pine, Gilmore, 2011). The nature of the winery visit is specific to each region. By understanding the findings from wine tourism research within an experience economy framework, tourist operators can better develop and communicate their wine tourism offering (Mitchell, Hall, 2006). Wine tourism experiences are created through a process of visiting, learning and enjoying activities in the winery. Hence, wineries evolve into a performance space for staging memorable experiences for tourist visitors (Ali-Knight, Carlsen, 2003).

Macedonian wineries should broaden their offerings by including a diversity of appealing esthetic, educational, entertaining and escapist experiences, and gain a lasting competitive advantage. Research findings reveal that according to the experts’ opinions, the human resources, information and signage and landscaping are the core asset factors for visiting the winery. Macedonians are well known for their hospitality, and wine industry experts are satisfied with the employees in the wineries - with

their skills, friendliness, knowledge and multilingual capability, ranking their performance with the highest scores (4.53). On the contrary, wine industry experts evaluated information and signage, educational dimension, possibilities for unique accommodation and diversity and choice of activities as items with poor performance. The observations of wine industry experts might contribute in designing future activities: offering visitors easy access to wineries, better designed outdoor signage and improved communication with close collaboration of all involved parties. The landscaping was rated highly in importance for visiting a winery and as one of the most significant attributes of the wine touring experience. This gives further credence to the conclusion that visitors and wine industry experts perceive esthetic experiences as the most significant within the context of a winery visit.

Understanding the importance of the different items of the experience economy model for visiting a winery is essential for developing and improving wine offerings tailored to the visitor’s need and motivations. The challenge for wine operators is to develop and manage diverse relevant activities in order to create extraordinary guest experiences. Consequently, Macedonian wineries ought to provide numerous different activities in which the visitors may be engaged and immersed during their visit, which will create the visitors’ positive and unique experiences. A new demand for memorable experiences requires Macedonian wineries to enhance and improve their current offers. Consequently, experiences are no longer an optional added value, but a required benefit of the wine tourism offer; therefore, wineries should augment the visitor’s experience with authenticity.

The research results can be considered an indicative assessment of the current state of wine tourism in the Republic of Macedonia. Major research limitations concern the structure and size of the samples. Both samples were made up of the respondents chosen by a deliberate rather than a random selection. The sample sizes (17 wine industry experts and 33 wine tourists) are also a limitation. Therefore, it is impossible to generalize research findings.

A more comprehensive structural measurement model should be implemented in future studies where potential consequences (i.e. arousal, memory, quality, customer satisfaction) of the experience economy will be included in the existing model. The emerging interest and relevance of the experience economy model urge the need for its employment and research in the different industries and in a multicultural context.

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*Ezeni Brzovska
Đurđana Ozretić Došen
Ivana Simjanovska*

VAŽNOST RAZLIČITIH DIMENZIJ U ISKUSTVENOM MODELU VINSKOG TURIZMA MEĐU TURISTIMA I STRUČNJACIMA U VINSKOJ INDUSTRIJI U REPUBLICI MAKEDONIJI

SAŽETAK

Vinski turizam suočava se s novim izazovima gdje su turisti u potrazi za izvanrednim, jedinstvenim i nezaboravnim iskustvima, što od pojedinačnih nositelja ponude vinskog turizma zahtijeva razvijanje posebne i zanimljive ponude dodatne vrijednosti. Najnovija istraživanja ukazuju na potrebu cjelovitijega pristupa iskustvenoj prirodi vinskog turizma. Ova studija koristi relevantne konstrukte modela iskustvene ekonomije kako bi se otkrila važnost svake njegove dimenzije među posjetiteljima glavnih vinarija u Republici Makedoniji. Stručnjaci u vinskoj industriji rangirali su važnost i učinkovitost relevantnih atributa kao ključnih čimbenika uspjeha za posjetu vinariji. Cilj je rada analizirati je li konstrukt 4E jednako važan za turističke procjene iskustva vinskog turizma. Rezultati istraživanja pokazuju da su, prema mišljenjima stručnjaka, ljudski resursi, informacije i natpisi te uređenje okoliša ključni čimbenici uspjeha posjeta vinariji. Među posjetiteljima vinarija, dominantna dimenzija iskustvenih ishoda bila je estetska dimenzija. Nalazi istraživanja vinskog turizma, u sklopu modela iskustvene ekonomije, mogu biti korisni za sve uključene strane u vinski turizam, u svrhu unaprjeđenja njihove ponude posjetiteljima koji traže iskustvo.

Ključne riječi: iskustvena ekonomija, vinarije, vinski turizam, turističko iskustvo

Zoran Ivanović
University of Rijeka
Faculty of Tourism and
Hospitality Management
Primorska 42,
51410 Opatija, Croatia
profzorani@gmail.com
Phone: +38551294755

Suzana Bareša
University of Rijeka
Faculty of Tourism and
Hospitality Management
Primorska 42,
51410 Opatija, Croatia
profsuzanab@gmail.com
Phone: +38551294193

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Siniša Bogdan
University of Rijeka
Faculty of Tourism and
Hospitality Management
Primorska 42,
51410 Opatija, Croatia
profsinisab@gmail.com
Phone: +38551294193

PORTFOLIO ANALYSIS OF FOREIGN TOURIST DEMAND IN CROATIA

ABSTRACT

Tourism is currently one of the most important sectors for the economic development of the Republic of Croatia. It mainly focuses on foreigners from within the EU. Because of the dynamic and very competitive tourist market, it is hard to forecast foreign tourism demand nowadays. It can vary over time among tourists of different nationalities. Stability of inbound tourist demand forms an important condition for the development of tourism and foreign currency income. Considering that tourism policy-makers must distribute available resources to different tourism markets for use in promotion, the purpose of this study is to analyze, by country of origin, the number of overnight stays by inbound foreign tourists in accommodation establishments as well as their average daily spending in Croatia and to construct an optimal mixture of tourists of different nationalities that will help tourism policy-makers to optimize or maximize tourism revenues at a certain level of risk. The main idea of this research is to apply financial portfolio theory to Croatian tourism demand and to construct an optimal mixture of foreign inbound tourists when there is an infinite number of possibilities. Several optimal mixes were calculated with different risk/return options to show on which foreign tourist markets Croatia must focus. For example, to achieve the mixture of foreign tourists that provides the highest level of tourist consumption expenditures, tourism authorities should increase their resources on the German, Slovenian, Italian and Austrian markets. The results of this research can easily be modified according to policy maker's risk/return preferences.

Keywords: Croatian tourism, portfolio theory, tourism demand, optimal market mix, inbound tourism

1. Introduction

Tourism has become one of the fastest growing economic sectors in the world over the last sixty years, and it plays a very important role in the economic development of many countries. The relationship

between tourism and economic growth has been the subject of a variety of research papers for decades (Sinclair, Tsegaye, 1990; Sinclair, 1998; Briedenhann, Wickens, 2004; Kim et al., 2006; Payne, Merwar, 2010; Tang, Tan, 2015; Chou, 2013; Antonakakis et al., 2015; Gunduz, Hatemi-J, 2005). Being one of

the important areas in tourism research, tourism demand modelling and forecasting have attracted a great deal of attention from both academics and practitioners (Song, Li, 2008). The creation of jobs, improvements in local infrastructure and export revenues are just some of the many advantages provided by tourism. According to UNWTO (2017: 3)¹ in 2016 the tourism industry accounted for 10% of the world GDP and 7% of global exports. In many developing countries tourism ranks as the first export sector. International tourist arrivals (overnight visitors) hit a record of 1,235 million worldwide in 2016, up from 1,184 million in 2015. Demand continued to be strong in most source markets and destinations, despite ongoing geopolitical, economic and health challenges in some parts of the world. "The degree to which a country can benefit from its tourism sector depends largely on this sector's competitive position in the international tourist market" (Gomezelj, Mihalic, 2008: 294).

Currently, one of the most important sectors for Croatian economic growth is tourism, as it affects the Croatian economy both directly and indirectly. "Since the early 2000s, the country has become a major European tourist destination thanks to sunshine and sea" (Arnaud, 2016: 1). Today Croatia is trying to differentiate itself from other sun-and-sea destinations by emphasizing its shift towards a product that offers both beach and culture (Hughes, Allen, 2005). Croatia has achieved solid growth compared to the previous year, with more than 13.8 million international tourist arrivals in 2016 and 72.2 million international tourist nights spent in the tourist establishments according to the Statistical Yearbook of the Republic of Croatia (Croatian Bureau of Statistics, 2017)².

According to the World Travel and Tourism Council (2017)³ the direct contribution of travel and tourism to the GDP was 10.7% in 2016, and the total contribution according to the same source was 24.7% in the same year, while the direct contribution to employment was 10% and the total contribution of the travel and tourism sector to employment was 23.4%. Visitor exports generated in the travel and tourism sector amounted to 38% of total exports.

Because of these key facts, Croatia has placed much emphasis on the tourism sector as an engine for economic prosperity in recent years. Economic development and many businesses in Croatia depend on the state of international tourism demand. Therefore, an accurate forecast of the international

tourism demand is fundamental for future planning of economic (tourism) development. According to Song et al. (2009: 2) conditions that relate to the quantity of tourism demand include tourism prices for the destination, tourists' living costs at the destination, potential consumers' incomes, advertising expenditures, consumers' tastes in the origin (generating) countries, and other social, cultural, geographic and political factors.

Tourism demand is volatile from year to year, and it varies among tourists of different nationalities. There are many reasons why international tourism demand is unstable, for instance: prices, promotional activities, political reasons and many others. Different tourist nationalities have different levels of volatility or risk, as measured by the variations in demand (Jang, Chen, 2008; Zhang et al., 2016). Policy-makers may aim to avoid the adverse effects which can result from variations in demand by means of measures such as the selective use of an advertising budget to attract a distribution of tourists by nationalities so that the total level of variations in tourist expenditure is minimized (Board et al., 1987: 124).

Previous papers have mostly used the portfolio theory in the context of tourist arrivals. Tourist overnight stays are a much more important indicator, especially when they are multiplied by the average daily tourist consumption expenditure per country. According to the portfolio theory, it is possible to calculate combinations of various tourist nationalities which will maximize revenues at a certain level of risk. "Portfolio analysis provides a useful additional concept for planners and policy makers within the tourism sector" (Kennedy, 1998: 125). The effect of reducing risk by using a combination of tourists of different nationalities is called diversification (cf. Ivanovic et al., 2013). "Diversification is one of the most promising strategies for tourism firms" (Andreu et al., 2010: 7).

2. Overview of the Croatian economy and tourism

Prior to the global financial crisis (2000-2007), the Croatian economy annually grew by 4-5%. This growth was led by tourism and credit-driven consumer spending. During the same period the Croatian currency was stable and inflation remained quite tame. Everything changed in 2008, the year of transition from economic growth to a period of recession. From 2009 until 2015 the Croatian eco-

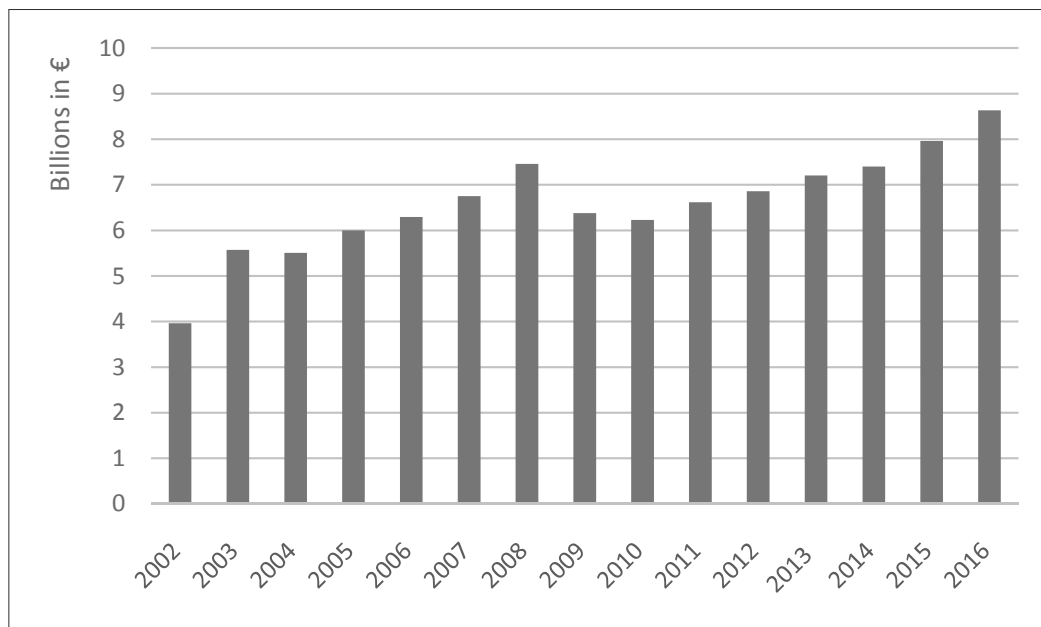
nomy was stagnant or negative each year. Finally, after six long years (2009–2015), Croatia came out of the recession. During that period Croatia had to face a high unemployment rate, uneven regional development, reduced foreign investments and lower exports. From 2008 to 2014 GDP dropped by more than 9.8%, but later, in the period from 2014 to 2016, GDP started to recover with a growth rate of 6.9% according to the data provided by Eurostat. During the recession period the unemployment rate reached its peak in 2013, when it reached 17.4%, but by November 2017 it had dropped to a level of 12.1% according to data from the Croatian Bureau of Statistics (2017)⁴. However, the Croatian economy is still facing low performance, the manufacturing sector in Croatia is not fully integrated in global supply chains, Croatia's goods exports have suffered from lost competitiveness and delayed integration in the EU, and the brightest point in Croatian economy is currently tourism. Croatia is often called a tourism-oriented country with a tourism-dependent economy. The tourism industry plays an important role in offering employment opportunities and genera-

ting income and foreign exchange revenues. It tends to combine the large surplus in services with large deficits in merchandise trade. Because of this tourism-dependent economy, policy-makers have a great responsibility to attract a range of different nationalities, which will minimize the volatility of international tourism demand. More reliance on tourism implicates bigger adverse effects on the economy if there is a fall in international tourist arrivals. A decrease in international tourism demand can result in increasing unemployment, falling tax revenues, decreasing levels of income and many other negative long-term effects.

3. International tourism demand for Croatia

According to the number of tourist arrivals and overnight stays, Croatia is continuously breaking records. In 2016 there were 15.6 million tourist arrivals and 78.05 million overnight stays. Whereas the growth of the aforementioned indicators in the tourism sector has been significant, financial recovery since the recession has not followed suit.

Figure 1 Tourism revenues in Croatia from 2002 to 2016

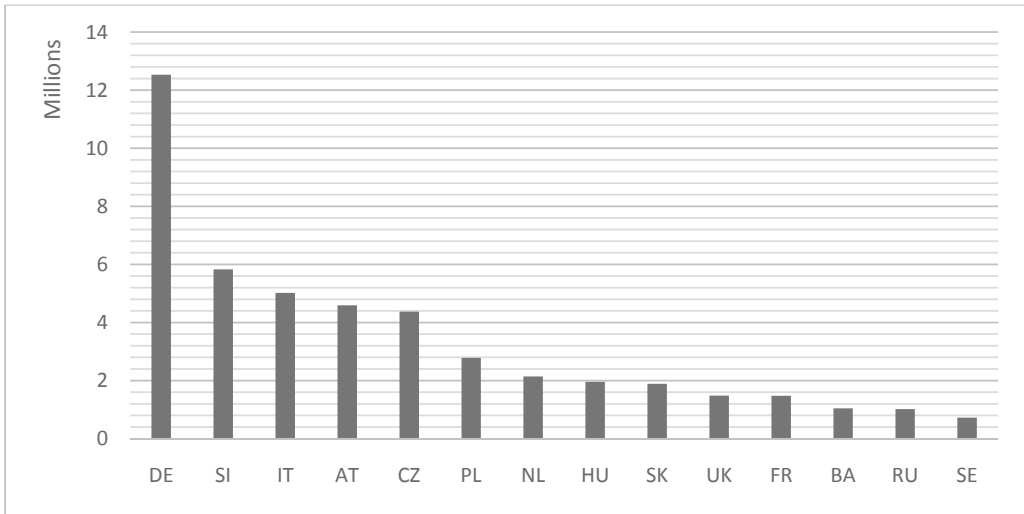


Source: Croatian National Bank, Balance of Payments 2017⁵

By looking at Figure 1, one notices that tourism revenues grew until 2008, when they started to fall. In 2010, they bottomed out and started to recover in 2011. In 2015 tourism revenues exceeded the 2008 level, and 2016 was record-breaking for Croatia. The number of foreign tourist arrivals in Cro-

atia increased from 6,944,000 in 2002 to 13,809,000 in 2016 and the number of tourist overnight stays rose from 39,711,000 in 2002 to 72,193,000 in 2016 according to the data from the Statistical Yearbook of the Republic of Croatia (Croatian Bureau of Statistics, 2017 and 2007)^{6,7}.

Figure 2 Average number of tourist nights spent in Croatia by country of residence in a period from 2002 to 2016



Source: Statistical Yearbook of the Republic of Croatia 2017

Figure 2 shows the 14 European countries with the largest average number of tourist overnight stays in Croatia in the period 2002–2016 for which average daily consumption data were available. These countries are presented by ISO 3166-1 alpha-2 codes (DE Germany, SI Slovenia, IT Italy, AT Austria, CZ Czech Republic, PL Poland, NL Netherlands, HU Hungary, SK Slovakia, UK United Kingdom, FR France, BA Bosnia and Herzegovina, RU Russia and SE Sweden). The 14 countries observed together constitute 85.5% of the total number of foreign tourist overnight stays in Croatia in 2016. The most loyal guests come from Germany. The average share of German tourists in this sample of 14 countries is 26.7%. Ranked second and third, respectively, are Slovenian tourists with 12.4%, and Italian tourists with 10.7%, followed by Austrians with 9.8%, Czechs with 9.3%, Polish tourists with 5.9%, Dutch

tourists with 4.6%, Hungarians with 4.2%, Slovaks with 4%, Britons with 3.2%, French tourists with 3.2%, Bosnians with 2.2%, Russians with 2.2% and tourists from Sweden with 1.5%.

Several reasons could be pointed out why Germans are the most frequent guests according to the number of nights spent in Croatia. More than 332,000 Croats live in Germany according to the Population and Employment Report (Federal Office of Statistics in Germany, 2016)⁸. Besides Croatia’s natural beauty and its cultural heritage, when it comes to purchasing power, Croatia may be a favorable destination for Germans, since their average gross monthly salary exceeds the Croatian salary by approximately three times. Table 1 presents two important datasets for this research. The first refers to the *gross average monthly wages* in EUR and the second to *average daily tourist spending in Croatia*.

Table 1 Gross average monthly wages in EUR and average daily tourist spending in Croatia in EUR

Country	Gross average monthly wages (in EUR)	Average daily tourist spending in Croatia (in EUR)
DE	3193.5	62.1
SI	1897.3	53.0
IT	2427.4	66.1
AT	3453.5	72.2
CZ	1023.9	53.3
PL	915.7	61.7
NL	3894.5	65.5
HU	833.2	63.2
SK	1050.2	61.3
UK	3473.8	121.8
FR	3069.0	94.8
BA	665.0	60.2
RU	496.0	98.6
SE	3522.0	114.6
HR	1029.6	50.5

Source and notes: United Nations Economic Commission for Europe (UNECE)⁹ data for gross average monthly wages (in 2016) were denominated in US \$. For comparison purposes, data was converted to EUR according to an average euro reference exchange rate of 0.9039 in 2016 according to the ECB. Average daily tourist spending in Croatia was retrieved from the Institute for Tourism Croatia. Tomas—Attitudes and Expenditures of Tourists in Croatia 2014

According to Table 1, only four countries have lower gross average monthly wages than Croatia. Therefore, most of the countries sampled have higher gross average monthly wages, which makes Croatia more affordable for tourists from those countries. All foreign tourists from the sample have a higher average daily spending rate at their destination compared to domestic tourists in Croatia. The correlation coefficient between gross average monthly wages and average daily tourist spending is 0.46. This value shows a positive moderate relationship between the two values observed. Some countries, like Russia, have lower gross average monthly wages, but they have high average daily tourist spending levels. German tourists enjoy higher gross average monthly wages than most of the countries observed, but they have a lower daily spending rate at their destination compared to countries which have lower gross average monthly wages, like Italy, France and Hungary, but spend more at their destination.

4. Financial portfolio theory

Financial portfolio theory has its origins in financial analysis and attempts to maximize a portfolio's return for a given level of risk or to minimize risk for a given level of return. This theory offers investors the possibility to construct portfolios according to their own risk preferences. In finance, risk represents the possibility of a variation compared to the expected utility of the investor (Goncalves, Ratsimbanierana, 2012). Although financial portfolio theory is a specific part of financial analysis, it can be applied to tourism. International tourism demand is volatile, like stocks. Policy-makers must use their resources wisely to attract tourists of different nationalities, just like fund managers must use their resources wisely to choose and buy the best combination of stocks for a well-constructed diversified stock portfolio. The beginning of *modern* portfolio theory is considered to be 1952, when Harry Markowitz, who is often called the father of modern portfolio theory,

published the article "Portfolio Selection". Later, in 1959, he expanded his research into a book-length study called "Portfolio selection: Efficient Diversification of Investments". By using this theory, an investor can construct an efficient frontier of optimal portfolios which offer the maximum expected return for a given level of risk. There are two basic rules for choosing a portfolio on the efficient frontier:

$$E(r_{pA}) \geq E(r_{pB}), \sigma_{pA} < \sigma_{pB} \quad (1)$$

$$E(r_{pA}) > E(r_{pB}), \sigma_{pA} \leq \sigma_{pB} \quad (2)$$

According to the first rule (1), Portfolio A has priority over Portfolio B if the return is equal or higher, and if the risk (standard deviation) is lower than for Portfolio B. According to the second rule (2), Portfolio A has an advantage over Portfolio B if the return is higher and if the risk (standard deviation) is lower than or equal to that of Portfolio B. Over the years, the mean-variance approach has come to dominate the portfolio selection process, at least academically (Uysal et al., 2001). Portfolio analysis enables strategic assessments to be made concerning multiple strategic business units and their future resourcing requirements (McKercher, 1995). Besides business units, modern portfolio theory can be applied to optimal foreign tourist market mixes. According to Laimer and Weiss (2009: 29), "potential users of portfolio analysis are all groups interested in tourism-related statistical data, those who are decision-makers in the tourism industry such as local tourism managers relying on profound statistical data". There are several studies which have applied financial portfolio theory to the tourism sector. Board et al. (1987) used a portfolio theory model to calculate the risk-minimizing distribution of accommodation nights by tourists of different nationalities in hotels and hostels in Málaga over the period from 1966 to 1985. Chen et al. (2011) applied portfolio theory to Japan's inbound tourist markets and proposed optimal market shares by nationality. They highlighted diversification in tourism markets and offered tourism policy-makers in Japan explicit guidelines for the long-term development of the country's tourism industry. Kennedy (1998) applied financial portfolio theory to the Irish tourism industry so he could calculate which range of nationalities would minimize the volatility of tourism demand. Águas et al. (2000) concluded in their paper that market portfolio analysis is an essential tool for tourist destination management. Calanto-

ne and Mazanec (1991) applied portfolio analysis to tourism by plotting countries of origin markets to a destination according to growth rates and relative market shares. Loi and Tou (2013) suggested a portfolio analysis model using the risk (fluctuation patterns of tourist arrivals) and return (per capita expenditure of tourists). They analyzed the tourist destination of Macao, but their model can be applied to any other tourist destination as well. Botti et al. (2011) applied financial portfolio theory to rationalize destination management's decision-making. Ratsimbanierana et al. (2013) analyzed Moroccan destination performance by using the mean-variance shortage function approach. Smeral and Witt (2002) highlighted the importance of the analysis of destination country portfolios, which is essential for evaluating the overall competitive position of tourist destinations.

This paper has applied the portfolio theory model to the Croatian inbound tourism industry to determine market shares that will suggest to Croatian policy-makers how to distribute available resources in order to minimize the volatility or maximize tourist consumption expenditure at a certain level of risk.

5. Financial portfolio approach in modelling foreign tourism demand

Considering that Croatia is a country with a large share of tourism in its GDP, a reduction in tourism demand would have serious effects on GDP, employment, capital investments, etc. To reduce the possible harm caused by a decline in tourist consumption expenditure (TCE), one of the priorities of tourism policy-makers is to control the volatility of TCE. According to UNWTO (1994: 21)¹⁰ tourism expenditure is defined as "the total consumption expenditure made by a visitor or on behalf of a visitor for and during his/her trip and stay at destination". Thus, for this research the number of tourist overnight stays per country (Table 2) was multiplied by the average daily tourist spending per country (Table 1). The multiplication product represents the estimated tourist consumption expenditure for every country observed.

Using portfolio theory, policy-makers can optimize or maximize TCE for a certain level of risk. The first step in applying this theory was to decompose the number of foreign tourist overnight stays in Croatia by country of origin and to determine the average number of overnight stays per country (Table 2).

Table 2 Foreign tourist overnight stays in Croatia by country of residence (in '000)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
DE	10789	11056	10888	11001	10987	10849	10983	11451	11476	12487	13947	14435	14749	15770	17082
SI	4993	5208	5032	5099	5246	5690	5802	5635	5885	6389	6240	6159	6236	6678	7140
IT	4883	5323	5375	5699	5475	5452	5069	5135	4732	4995	4535	4396	4466	4800	4961
AT	3543	3585	3638	3757	4069	4245	4165	4515	4420	4836	5104	5208	5404	5902	6511
CZ	4560	4554	4173	4052	3921	4395	4122	4020	4170	4389	4520	4539	4600	4812	4770
PL	2186	1331	1286	1375	1612	1834	2512	2738	2895	3134	3408	4079	4078	4323	4964
NL	1204	1497	1690	1910	1938	2030	2335	2446	2244	2224	2566	2491	2415	2477	2661
HU	1733	1905	2092	2405	2196	1985	1934	1644	1605	1746	1630	1728	1931	2266	2528
SK	1223	1205	1101	1183	1428	1832	1927	2000	2084	2282	2294	2258	2383	2550	2606
UK	661	721	1015	1349	1366	1276	1223	1229	1173	1237	1505	1907	2102	2419	3027
FR	419	689	1242	1920	1708	1665	1635	1533	1464	1484	1539	1644	1658	1709	1886
BA	787	848	755	829	948	1147	1199	1079	1048	1061	1066	1002	1091	1300	1481
RU	505	510	605	695	937	1289	1447	1068	1376	1498	1578	1222	1045	740	739
SE	166	271	457	690	719	664	722	644	637	652	730	972	1032	1070	1405
OE	1503	2026	2468	3192	3477	4048	4355	4279	4574	4912	5159	5606	5598	5984	6990
O	556	594	699	831	995	1173	1195	1085	1209	1425	1701	2034	2536	3062	3443
Σ	39711	41323	42516	45987	47022	49574	50625	50501	50992	54751	57522	59680	61324	65863	72193

Source: Croatian Bureau of Statistics, *Statistical Yearbook of the Republic of Croatia 2017*¹

Note: OE—Other European countries, O—Other world countries

Table 2 shows the analysis of foreign tourist overnight stays in Croatia. In spite of the global financial crisis, Croatia has enjoyed steady growth in tourist nights spent in accommodation establishments, except in 2008. Although the number of tourist overnight stays increased over the 15-year period, the growth of each market varied. During the period observed, German visitors spent more than one-

fifth of the total realized tourist nights in accommodation establishments in Croatia.

Considering that the aim of this research was to help tourism policy-makers to optimize or maximize TCE at a certain level of risk, the second step was to determine the risk of tourist markets individually. The authors observed the estimated TCE over this period of 15 years (2002-2016).

Table 3 Volatility and mean value of estimated tourism consumption expenditure (in '000 in EUR)

	DE	SI	IT	AT	CZ	PL	NL	HU	SK	UK	FR	BA	RU	SE
Mean	777,736	308,633	331,954	331,836	233,089	171,698	140,250	123,491	115,918	180,315	140,335	62,781	100,246	82,732
Volatility	126,082	33,063	25,175	62,130	14,407	71,307	26,800	17,701	31,457	74,815	37,894	11,427	35,384	34,401
Min	669,673	264,379	290,707	255,946	208,989	79,320	78,838	101,372	67,513	80,497	39,738	45,459	49,783	19,019
Max	1,060,280	378,037	376,875	470,383	256,479	306,173	174,240	159,658	159,777	368,587	182,093	89,165	155,559	161,026
Coeff. of variance	0.16	0.11	0.08	0.19	0.06	0.42	0.19	0.14	0.27	0.41	0.27	0.18	0.35	0.42

Source: Authors

According to Table 3, Germany has the highest mean value, but also the highest volatility. Italy is in the second place according to the mean value accompanied by very low volatility, followed by Austria, Slovenia, the Czech Republic, the United Kingdom, Poland, etc. The coefficient of variance served as a measure that indicates the relative risk per TCE over the period of 15 years. The Czech Republic has the lowest coefficient of variance at 0.06, followed by Italy and Slovenia. After estimating the mean values of TCE per country, the next step was to calculate the portfolio rate of return $E(r_p)$, which is calculated as a weighted average of TCE in the portfolio, and the weights (w_j) are shares of different foreign markets in the portfolio. Tags found in subscript $-p$ indicate the portfolio, while i and j indicate foreign tourist markets. The expected return for the portfolio can be expressed as:

$$E(r_p) = w_i E(r_i) + w_j E(r_j) \dots \dots \dots w_n E(r_n) \quad (3)$$

or generally for n foreign markets in the portfolio

$$E(r_p) = \sum_{i=1}^n w_i E(R_i) \quad (4)$$

Every foreign market has to be assessed on the basis of expected return and risk contributions for the entire portfolio. The risk (volatility) of the portfolio return depends on the covariance of different international markets in the portfolio. The risk of the market portfolio can be expressed as:

$$\sigma_p = \sqrt{\sum_{i=1}^n w_i^2 \sigma_i^2 + 2 \sum_{i=1}^{n-1} \sum_{j=i+1}^n w_i w_j Cov(R_i, R_j)} \quad (5)$$

where σ_p is the standard deviation of portfolio return. $Cov(R_i, R_j)$ stands for the covariance of the market returns. The portfolios that have the greatest expected return for each level of risk constitute

the efficient frontier. A risk-averse investor would only choose portfolios that are on the efficient frontier because all available portfolios that are not on the efficient frontier have lower expected returns than an efficient portfolio with the same risk. The next step was to find diversification possibilities. According to the correlation matrix it can be concluded that most of the correlation coefficients are positive, 15 country pairs have a negative relationship and 14 coefficients have a weak positive relationship, which is considered good for reducing the instability of TCE.¹²

Every market participates in the portfolio under the following condition:

$$\sum_{i=1}^n w_i = 1 \quad (6)$$

The second condition was:

$$w_i \geq 0 \quad (7)$$

To make the results as realistic as possible, all the weights of the individual markets have additional constraints on their upper and lower limits. In other words, the authors of this research project decided to put upper and lower constraints on weights 30% above the highest estimated TCE in the observed period of 15 years and 30% under the minimal estimated TCE in the same period. The authors found $\pm 30\%$ constraints sufficient, according to growth rates in recent years.¹³ Other constraints can be applied depending on the situation; individual constraints can also be applied to certain markets, if necessary.

The optimal mixture of inbound tourists has an infinite number of possibilities. In Table 4 several portfolio combinations are calculated with different return/risk options to determine towards which foreign tourist markets Croatia must be oriented.

Table 4 Optimal market portfolios

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	C
DE	0.36	0.36	0.33	0.31	0.29	0.28	0.25	0.24	0.22	0.20	0.19	0.16	0.16	0.16	0.25
SI	0.11	0.11	0.13	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.10	0.06	0.09
IT	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.08
AT	0.15	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06
CZ	0.04	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.11
PL	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.07
NL	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.05	0.07	0.07	0.07	0.04
HU	0.02	0.02	0.02	0.03	0.05	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.04
SK	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.04
UK	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
FR	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.02	0.02	0.05	0.08	0.09
BA	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.03	0.04
RU	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.04	0.06	0.06	0.06	0.06	0.06	0.06	0.02
SE	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.04
Σw_i	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$E(r_p)$	457,910	450,000	435,000	425,000	410,000	400,000	385,000	375,000	365,000	350,000	340,000	325,000	315,000	307,921	360,116
σ_p	60,432	56,415.6	53,331.4	51,389.2	48,658.1	46,841.7	44,133.1	42,340.0	40,557.9	38,091.0	36,479.0	34,077.3	33,185.1	32,872.5	56,665
TCERR $E(rp)/\sigma_p$	8.00	7.98	8.16	8.27	8.43	8.54	8.72	8.86	9.00	9.19	9.32	9.54	9.49	9.37	6.00

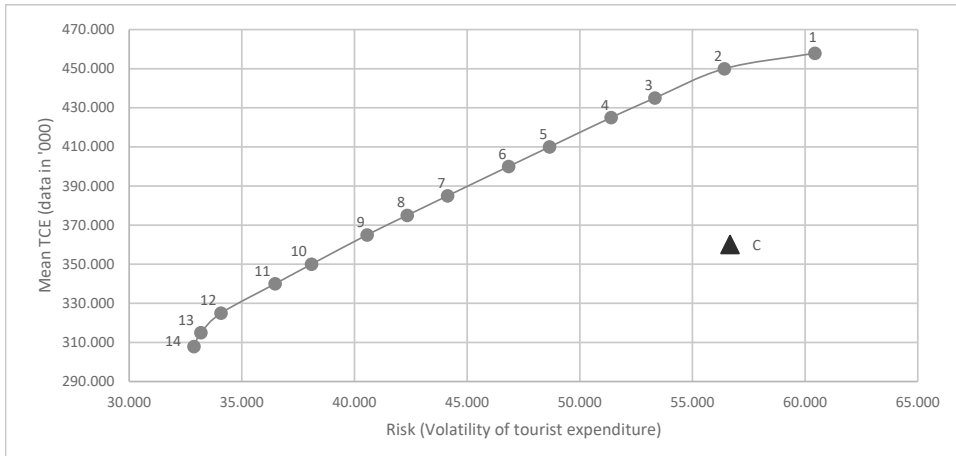
Source: Authors

Note: The mean value of TCE $[E(rp)]$ is in '000

Every portfolio has a different combination of market shares and a different mean value of TCE (expected return $E(r_p)$) and risk (standard deviation). Weights were estimated by quadratic programming, using the Solver program. The first portfolio has the highest possible mean TCE with the highest risk; it consisted mostly of the German, Slovenian and Austrian markets. It has a mean TCE of 457,910 and a standard deviation of 60,432. Extreme risk avoiders will choose Portfolio 14, which has minimal risk, but also a minimal value of expected mean TCE. It consists mostly of Italian (18%), German (16%) and Czech tourists (13%). There are approximately equal shares of Slovenian, Austrian, Dutch, Hungarian, French and Russian tourists. Portfolio 14 has the

lowest expected mean value of TCE at 307,921, but also the lowest risk of 32,872.5. The portfolio with the largest value of tourist consumption expenditure reward ratio (TCERR) is Portfolio 12. TCERR (9.54) is calculated as a mean of TCE divided by standard deviation. This portfolio offers the best ratio between estimated mean TCE and risk. If policy-makers have a stronger preference for the high mean TCE, but high risk, they can choose Portfolios 1, 2 or 3, or they can choose Portfolios 12, 13 or 14 for the low mean TCE/low instability. All shown portfolios lie on the efficient frontier. Any investor who thinks rationally will choose the portfolio from the efficient frontier because it promises the best combination of risk and return.

Figure 3 Efficient frontier

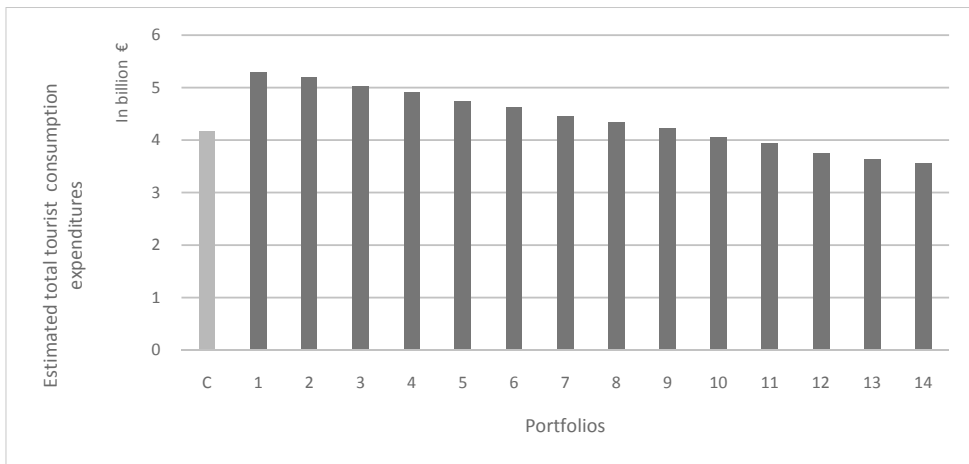


Source: Authors

The efficient frontier connects 14 market mixes. Every portfolio that lies on the efficient frontier has the least instability for a given level of estimated mean value of TCE. The current real results for Croatia in 2016 are shown in Figure 3 as Portfolio C.

For approximately the same risk, policy-makers can choose Portfolio 2 and achieve much larger mean TCE value. For instance, Figure 4 shows the estimated total tourist consumption expenditures for each Portfolio, including the current real Portfolio C.

Figure 4 Estimated total tourist consumption expenditures



Source: Authors

All portfolios that lie above Portfolio 9 (Figure 3), have a higher estimated total TCE than Portfolio C. Portfolio 2 includes approximately the same risk as Portfolio C, but Portfolio 2 has a 25% higher estimated total TCE when compared with Portfolio C.

6. Conclusion

This study can help Croatian policy-makers to decide towards which foreign tourist markets Croatia must be oriented in line with their own risk preferences. As explained earlier, the stability of inbo-

und tourist demand represents a very important condition for tourism development, GDP growth, rise in employment and many other positive long-term effects, especially in Croatia, where travel and tourism made a 10.7% direct and 24.7% total contribution to GDP in 2016 (World Travel and Tourism Council, 2017)¹⁴. According to the same source, the total contribution of the travel and tourism sector to employment was 23.4%. Visitor exports generated in the travel and tourism sector amounted to 38% of total exports. For all these reasons, Croatia is often called a tourism-oriented country with a tourism-dependent economy. Policy-makers in Croatia have a great responsibility to use the available resources wisely and to attract a range of tourists of various nationalities, which will optimize or maximize tourism revenues at a certain level of risk. Applying portfolio theory to tourism provides policy-makers with different solutions in terms of setting goals, limiting risk and reallocating resources. This theory is well known in finance as an investment decision tool, but it has a wide range of applications. Using this theory, policy-makers can construct an optimal mix of international tourist markets, which will maximize the tourist consumption expenditure at a certain level of risk. For example, if policy-makers accept the currently estimated risk, they can choose Portfolio 2, which has approximately the same risk as Portfolio C, but with 24.96% higher estimated average tourism consumption expenditures. If policy-makers choose Portfolio 2 as a solution, they should focus more on the following markets: DE, SI, IT and AT. However, if policy-makers decide to choose a portfolio according to reward ratio, they should choose Portfolio 12 (TCERR=9.54) and increase following market weights: SI, IT, AT, CZ, NL, HU and RU. Although this research provides several solutions, they could easily be modified according to policy-makers' preferences.

7. Limitations and future research

Despite the theoretical and practical relevance of this paper, there are some limitations that give rise to future research suggestions. First, portfolio theory in tourism can only be used in the long run. On

the stock market it is possible to replace stocks quickly (if conditions like liquidity, transaction costs and others are met). In tourism, it is not possible to adjust the market composition so quickly. Tourism requires long-term planning. Second, investors in stock markets increase the weights of higher return/risk assets and decrease the weights of lower return/risk assets in their portfolio to achieve an optimized portfolio. However, in tourism policy, the policy-makers always increase the number of tourist arrivals/nights spent in Croatia, regardless of where they come from, since every tourist is important, and the tourism policy-makers do not ignore them. Therefore, the application of financial portfolio theory to tourism issues should be considered carefully. Third, portfolio theory does not include trends which are present in the tourism industry. Fourth, the average consumption of tourists of different nationalities is presented on the basis of the research by the Croatian Institute for Tourism, which included a sample of 2,487 tourists. Data is not available for every year; the latest available data was from 2014. Such data must be considered with caution because the average tourist spending depends on the chosen accommodation (hotel, camp or private accommodation). The survey results also vary regarding the counties where tourists are surveyed, age of respondents, length of stay, degree of education, arrival motive and many other factors. The lack of detailed revenue data limits the informative value of the results. Fifth, the expected tourist consumption expenditure and risk (instability) are based upon historical mean values and standard deviation, which are not appropriate for future decision-making, since past performance cannot be a guarantee of future performance. The constraints can be modified or based on a more detailed analysis, including the current trends and growth rates related to foreign tourists. Future research should be based on the full sample of tourists that spend nights in Croatia. In light of the fact that tourist market trends often change, it would be advisable to include them in future research, because foreign tourism demand doesn't fully depend upon policy-makers activities.

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Zoran Ivanović
Siniša Bogdan
Suzana Bareša

PORTFOLIO ANALIZA INOZEMNE TURISTIČKE POTRAŽNJE U REPUBLICI HRVATSKOJ

SAŽETAK

Turizam je trenutno jedan od najvažnijih sektora za ekonomski razvoj Republike Hrvatske te se uglavnom fokusira na strane turiste iz zemalja Europske unije. Zbog dinamičnog i vrlo konkurentnog turističkog tržišta, danas je vrlo teško predvidjeti turističku potražnju, koja varira u vremenu između turista različitih nacionalnosti. Stabilnost inozemne turističke potražnje čini važan preduvjet za razvoj turizma i devizne prihode. S obzirom da nositelji turističke politike moraju distribuirati raspoložive resurse na različitim turističkim tržištima u svrhu promocije Republike Hrvatske, svrha ovoga istraživanja je analizirati ostvarena noćenja stranih turista po zemljama podrijetla, jednako kao i njihovu ostvarenu prosječnu dnevnu potrošnju te konstruirati optimalnu kombinaciju turista različitih nacionalnosti u obliku portfelja, koji će pomoći nositeljima turističke politike u optimizaciji, odnosno u maksimizaciji ostvarivanja turističkih prihoda uz određenu razinu rizika. Glavni je cilj ovoga rada primijeniti financijsku teoriju portfelja na hrvatskoj turističkoj potražnji i konstruirati optimalnu kombinaciju inozemnih turista, te je bitno spomenuti da s obzirom na preferencije rizika i povrata postoji beskonačan broj mogućih kombinacija. U ovome istraživanju izračunato je nekoliko optimalnih kombinacija s različitim rizicima i povratima kako bi se utvrdilo na koje se strane turiste Republika Hrvatska mora fokusirati. Na primjer, kako bi se postigla kombinacija stranih turista koja pruža najvišu razinu turističke potrošnje, turističke vlasti trebale bi se više orijentirati na njemačko, slovensko, talijansko i austrijsko tržište. Rezultati ovoga istraživanja lako se mogu mijenjati prema kriterijima rizika / povrata turističke politike.

Ključne riječi: hrvatski turizam, teorija portfelja, turistička potražnja, optimalni tržišni miks, receptivni turizam

Krešimir Starčević
Atlantic Grupa d.d.
Miramarska 23,
10000 Zagreb, Croatia
krešimir.starcevic@atlanticgrupa.com
Phone: +38512413119

Boris Crnković
Josip Juraj Strossmayer
University of Osijek
Faculty of Economics in Osijek
Trg Ljudevita Gaja 7,
31000 Osijek, Croatia
boris.crnkovic@efos.hr
Phone: +38531224473

Jerko Glavaš
Josip Juraj Strossmayer
University of Osijek
Faculty of Economics in Osijek
Trg Ljudevita Gaja 7,
31000 Osijek, Croatia
jerko.glavas@efos.hr
Phone: +38531224473

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IMPLEMENTATION OF THE GENERAL DATA PROTECTION REGULATION IN COMPANIES IN THE REPUBLIC OF CROATIA

Abstract

This paper deals with the current issue of protecting individuals regarding the processing of their personal data and the free movement of such data. As this matter is also regulated by the European Union legislation, the paper describes and analyzes the scope, implications, methods and tools for applying the new EU regulation adopted on 27 April 2016 by the Parliament and the Council of the European Union. The subject matter is the Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data. The short title of this Regulation is *General Data Protection Regulation* (GDPR). The term GDPR is thus in common everyday use in companies and among business people, and will also be used in this paper. In addition, the paper analyzes the research conducted on the existing state of affairs and the way in which all collected personal data are processed and used by all stakeholders in the company Atlantic Grupa d.d., Zagreb. In addition, a harmonized project of a structured and methodologically correct procedure for implementation of the provisions of the new Regulation is described for the purpose of achieving the highest degree of compliance of all members of Atlantic Grupa d.d. with the provisions of the GDPR. Finally, the basic objective of the described project is explained, which is to avoid situations that would lead to the extremely high fines for non-compliance with the Regulation.

Keywords: Protection of individuals and their personal data, General Data Protection Regulation (GDPR), Atlantic Grupa d.d.

1. Introduction

1.1 Selected topic

The use of personal data and the question of its protection has always been part of everyday life of all of us, in almost all spheres of activity we are engaged or involved in — from employment to health care, communication with state institutions, participation in prize games, browsing of Internet content etc. Knowingly or unknowingly, we give away our personal information, knowing or not knowing, or not thinking, about the fact that our data is stored somewhere, reviewed, analyzed, and may be transferred to third parties or used for some purpose we may not agree with.

The large amount of personal data accumulated over the years in different places — from public and state authorities to banks, employers, insurers, healthcare systems, businesses — as well as the accelerated development of electronic processing and exchange of personal data, and above all the accelerated and ubiquitous trend of the availability of personal data on the Internet and social networks, has required a normative solution to strengthen and commonly regulate the area of personal data protection.

The Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (the **Regulation** or **GDPR**) is just such a solution.¹ The Regulation also puts an end to the previous Personal Data Protection Directive (95/46/EC) concerning the processing and free movement of personal data. The Regulation will be in direct implementation in all EU Member States starting on **25 May 2018**, which means that, by its legal force, it becomes the umbrella EU data protection law, which will be directly implemented in the legislation of all EU members without the possibility of interpretation.

1.2 Description of the problem

The EU and the Member States have acted in the area of personal data protection in the normative manner before, in order to achieve a level of protection that would guarantee the right to privacy of a person as a fundamental human right, as expressed in Article 8 of the Convention for the Protection of Human Rights and Fundamental Freedoms of 1950.

In this respect, and as a result of the accelerated development of electronic processing of data that has been stored and used without control and without

normative arrangements in various sectors, with a great potential for abuse, the very beginning of personal data protection, according to Orešić (2017), dates back to 1981, when the Council of Europe in Strasbourg adopted the Convention on the Protection of Individuals with regard to Automatic Processing of Personal Data and the Additional Protocol to the 2001 Convention. For the purpose of raising the public awareness of the protection of personal data, the Council of Europe proclaimed the date of the adoption of the Convention — 28 January — the European Day of Personal Data Protection (known as the *Privacy Day* outside Europe).

According to Protrka (2012), the Convention was the starting point for the development of Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data. The scope of the Directive was considerably broader than the scope of the 1981 Convention. In addition to the automated data processing files, it also included both public and private data files compiled by conventional means.

The Directive sought to achieve a high and uniform level of protection of personal data within the EU, and to balance the ongoing conflict between the individuals' interest in the protection of their privacy and the general interest in the free flow of information, while providing a certain degree of technical and legal protection of personal data as well as removing the obstacles to data exchange.

Despite all the advances in the area of personal data protection achieved by the Directive, it has not achieved a unified approach and scope of protection in Member States' national legislations, while the development of modern technology and the boom of the Internet demanded a solution that would be aligned with the contemporary trends while providing a greater degree of protection and transparency in the use of personal data.

For this reason, a new document has been drafted. After four years of preparation and discussion in the EU bodies, the Regulation was approved by the EU Parliament on 14 April 2016. The Regulation came into force 20 days after its publication in the EU Official Gazette to become directly applicable in all EU Member States two years after that date, i.e. on the date of its full application — **25 May 2018**.

The normative regulation of the protection of personal data in the Republic of Croatia rests on the provisions of the Constitution that guarantee the

right to privacy and expressly guarantee the security and confidentiality of personal data. Bet Radelić (2017) explains that this area of law is regulated by the Personal Data Protection Act, which — as the highest legal standard in the field of personal data protection in the Republic of Croatia — regulates the conditions of personal data processing, and defines the legal basis for the processing, the obligations of the controllers of personal data sets, the powers of the supervisory authorities, and sanctions for non-compliance with the legal provisions. In addition to the Personal Data Protection Act, also in force in the Republic of Croatia are the Convention on the Protection of Individuals with Regard to Automatic Processing of Personal Data and the Additional Protocol to the Convention — ratified in 2005 — and Directive 95/46/EC. Those regulations will be in force until 25 May 2018, whereupon begins the direct application of the Regulation (GDPR) in the Republic of Croatia.

1.3 Need for further monitoring of regulation

Given that the Regulation itself provides for certain areas to be defined, or regulated differently, by national legislation, the Republic of Croatia faces the need to adopt the laws that will be applied in conjunction with the Regulation. It is also necessary to follow the rulings of the European Court of Justice (ECJ) whose rulings are binding on all EU members. Therefore, the need for further monitoring of this topic and the relevant regulation continues. As the date of implementation of the Regulation draws closer, this topic will certainly elicit various interesting discussions in the public at large.

1.4 Topicality of the issue

The Regulation prescribes penalties for controllers or processors who violate the Regulation, which may reach up to 4% of annual global turnover or EUR 20 million, whichever is greater. It is the biggest penalty that can be imposed for the most serious violations, such as breaches of the basic principles, the rights of data subjects and the rules on the transfer of personal data to third countries. A lower penalty of up to 2% of annual global turnover or EUR 10 million, whichever is greater, will be applied for lesser offenses, such as missing regular records, failure to give notice of breach, or failing to carry out impact assessments.

Also provided is the liability of the controller or processor for the damage caused to the data subject by the processing of personal data in a way that is not in conformity with the Regulation. If the controller and processor are involved in the said processing, each is liable for the entire damage to the individual plaintiff.

Because of the above points, the issue is highly topical.

1.5 Purpose and goals of the study

The purpose of the short survey, which was carried out for this study on the example of Atlantic Grupa d.d., Zagreb, Miramarska 23 (hereinafter **Atlantic**), refers to the analysis of the situation regarding the collection, processing and use of personal data in the company with the aim of alignment of the Atlantic system with the provisions of the new Regulation. In accordance with the foregoing, the goals of this paper are: (I) to point out the importance of the new Regulation for all EU member states; (II) to identify the areas within the company, specifically Atlantic, that are subject to change and adaptation to the new Regulation; (III) to present the elaborate plan for the implementation of measures and actions necessary to align the company system, specifically that of Atlantic, to the new Regulation.

2. Theoretical framework

At the beginning of this section, we are trying to define the term *information*, why it is important to collect it, and what is the process of gathering information as conceived here. The shortest, but perhaps the best definition is this: "Information is the data that is managed in a way that can be used" (McKnight, 2014: 34).

If we agree that the definition is appropriate for the topic of this paper, it should be clarified how the process of information gathering or development takes place. Looking for the best description, we offer the definition that says: "The process of information development begins by gathering the facts and the statistical values we call the data. Once collected, the data is usually analyzed." (Certo, Certo, 2008: 534).

Finally, we need to explain why the information gathered is important to managers in the first place. The same authors state: "The information the managers get influences the decision making that determines activities within the organization to a large

extent, which eventually leads to the organization's success or failure." (Certo, Certo, 2008: 534).


If we consider these definitions in the current context and apply them to the topic of this paper, we must once again look at the Regulation itself and its legislative and theoretical scope. It is indisputable that the intention of the adoption of the Regulation was to regulate the area of personal data protection through legislation more effectively. The area was already regulated by the earlier Directive but it failed to achieve a uniform approach and scope of protection in the national legislations of EU members. If we add the accelerated development of modern technology and

the flourishing of the Internet and various social networks, it is obvious that a new solution had become necessary. It had to follow modern trends and provide a greater degree of protection and transparency in the use of personal data.

One has to be aware that the rapid acceleration in the development of modern technology in the area of information gathering and exchange will in a very short time require new regulation to update and modernize this matter yet again.

Before we proceed to elaborate this topic further, Figure 1 below presents a brief overview of the most important areas regulated by the new Regulation.

Figure 1 The most important areas covered by the Regulation (GDPR)

AREAS REQUIRING SPECIAL ATTENTION		
Determine what GDPR areas are the most important and have the biggest impact, and focus on those in planning		
<p>1. Awareness Ensure that the key stakeholders in the organization are informed about the GDPR and novelties it brings</p>	<p>12. Internationalization Establish an oversight body, if your organization is doing business in more than one EU member state (i.e. if you conduct cross-border processing).</p>	<p>11. Data protection controllers If you are under obligation, determine a person who will assume responsibility for compliance with the GDPR, and define the structure and management method.</p>
<p>2. Information in your possession Document what personal data you possess, where it came from, where you are using it and with whom you are sharing it.</p>		<p>10. Data protection by design and data protection impact assessment Verify whether it is necessary and ensure the processes and procedures that enable data protection by design, and based on the data protection impact assessment.</p>
<p>3. Communicating data on privacy Review the current privacy statements and ensure making the necessary changes within the appropriate time frames, using accurate and clear messages.</p>		<p>9. Data theft Ensure the appropriate procedures for discovering, reporting and analysis of personal data theft.</p>
<p>4. Rights of natural persons Implement the processes that will ensure respecting the rights of natural persons (e.g. data deletion, submitting data in the electronic form, etc.)</p>		<p>8. Children Ensure verification and control of the age group of individuals and obtain consent of the parents or legal guardians for any activity in data processing.</p>
<p>5. Requests for access to data Implement the procedures that will satisfy the new additional requests within the new time frames.</p>		<p>6. Legal basis for personal data processing Establish the lawful basis for data processing in GDPR, document and update your privacy statement in order to elaborate it.</p>

Source: UMiUM d.o.o., available at: www.umium.hr (Accessed on: November 20, 2017)

For better understanding of the provisions of the Regulation, here are the definitions of certain key terms as specified therein:

- **personal data** means any information relating to an identified or identifiable natural person ('data subject'); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person;
- **processing** means any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction;
- **controller** means the natural or legal person, public authority, agency or other body which, alone or jointly with others, determines the purposes and means of the processing of personal data; where the purposes and means of such processing are determined by Union or Member State law, the controller or the specific criteria for its nomination may be provided for by Union or Member State law;
- **processor** means a natural or legal person, public authority, agency or other body which processes personal data on behalf of the controller;
- **consent** of the data subject means any freely given, specific, informed and unambiguous indication of the data subject's wishes by which he or she, by a statement or by a clear affirmative action, signifies agreement to the processing of personal data relating to him or her.

In order to strengthen the area of protection of personal data and make an additional step in the direction of greater protection of citizens, the Regulation has strengthened the rights of citizens as *data subjects* — persons whose personal data are collected and processed — in comparison to the previous reg-

ulations, and introduced additional rights. This is, inter alia, particularly notable in the following areas:

- consent - it should be given actively by the data subject, and with a clear act of confirmation that expresses their voluntary and unambiguous agreement with the processing of their data. Such consent must be given for specific purposes and to the specified controller (express oral or written statement, field marking on the web site...), which means that the silence of a data subject, a pre-selected field with a check mark, or a lack of activity, are not considered to constitute consent;
- right of access (information) - the data subject has the right to know which of their data is being processed, the purpose of processing, to whom the data will be disclosed, the period of data storage etc.;
- right to limit processing / to erasure / to be forgotten - the data subject has the right to demand the termination of use and/or deletion of their data in whole or in the part they no longer agree to be processed, or to exclude the use of that data or its part for any particular purpose;
- right to object - the data subject has the right to address the controller with an objection regarding the manner and purpose of use of their data;
- right to portability of data - means the right of the data subject to obtain all their data in machine-readable format at any time and to easily transfer it to a new controller or processor;
- right to communication of a personal data breach.

Particular attention must be paid to the protection of personal data of children. The Regulation stipulates that consent of parents of children under the age of 16 is required for *online* services, while a member state may determine a lower age limit, but not lower than 13 years. In this respect, a controller must make every reasonable effort to check whether the parent has actually given consent.

Furthermore, the Regulation establishes exclusive conditions under which special categories of personal data may be processed — namely sensitive data (racial or ethnic origin, political opinion, religion or beliefs, trade union membership, health status, sexual life and orientation, genetic and biometric data)

— in which case explicit consent by the data subject is required if processing is necessary for the protection of their interests or for the fulfillment of special obligations or rights of the controller. In such cases, the processing must be specifically marked and protected, and subject to special measures of technical protection. If one or more of the listed conditions are not met, the Regulation expressly prohibits the processing of such personal data.

The question of who is actually bound by the Regulation is also important. The Regulation, in accordance with the defined territorial scope of application referred to in Article 3 is binding for:

- all controllers and processors established in the EU member states, regardless of whether the data processing takes place in or outside the EU, but also for
- controllers and processors not established in the EU if they carry out activities that include collection or processing of personal data of EU citizens (related to the offering of products or services, or to the monitoring of their activities and behavior within the EU).

The defined and strengthened rights of the data subject necessarily impose certain very important obligations on the controller and processor in terms of the use and processing of the subject's personal data.

The controller, as the operator who determines the purpose and method of processing of personal data, must:

- give the data subject full information on the purpose for which their data is collected, in a clear, intelligible and easily accessible form, using clear and plain language;
- be able to prove that the data subject has given consent for processing of their personal data;
- limit the collection of personal data solely to such data as are necessary to achieve the purpose of processing;
- ensure the lawfulness of processing (consent, performance of a contract to which the data subject is party, compliance with the legal obligations of the controller, protection of the key interests of the data subject, issues of public interest or execution of authority of the controller of a data set). Ensuring the lawfulness of processing is particularly important when the processing is carried out

for the purposes of legitimate interests of the controller, in cases where the interests of the data subject are greater, or when the interests of the data subject require the protection of personal data, especially those of children.

In addition to the obligations of the controller, the processor must:

- ensure the exercise of the rights of the data subject (information, limitation of processing / erasure / right to be forgotten, portability, notification of breach, protection of data on children and sensitive data);
- carry out appropriate technical and organizational measures in order to identify the personal data necessary for a specific purpose, define the scope of processing, the storage period, and limit their availability only to a certain necessary circle of persons;
- carry out the appropriate technical and organizational measures to ensure maximum security of personal data - also ensuring that the collected data are not altered and that they are *encrypted* and that an appropriate encryption key management process has been established. Security policies and controls must be introduced which must be able to prove that the data have not been altered, damaged, destroyed, lost, or illegally used;
- perform any such task upon request of the data subject in the shortest possible time, not longer than 30 days, and prove on request that the requested actions have been performed. The proof is a certificate of the work performed issued to the data subject. In the event of doubt and the request of the supervisory authority, the fact that the said actions have actually been carried out must be proved directly.

The Regulation also prescribes the obligation to keep records on personal data processing activities; the records must be kept by:

- controller employing more than 250 employees or
- controller whose processing is a probable risk to the rights and freedoms of the data subject (but only if the processing is not occasional), or
- controller handling special categories of personal data or data on criminal offences or

convictions; they shall, at the request of the supervising body, keep and submit records of the processing activities, which contain all the essential processing elements, such as the identity of the controller with contact information, the purpose of processing, the description of the data subject and the personal data, recipients of the data, data transfers to third countries, storage periods, etc.

The Regulation introduces the obligation to include data protection measures from the beginning of design of a system, rather than being added subsequently. The controller of the data set must follow organizational and technical measures to comply with the requirements of the Regulation and protect the rights and privacy of the data subject (*Privacy by Design*).

Given that the Data Protection Act is based on the consideration of risk, it is the responsibility of the controller to carry out an assessment of the effect of processing in situations where a certain kind of processing is likely to cause high risk for the rights and freedoms of the data subject; the Regulation also determines when such an assessment is mandatory — e.g. in systematic and comprehensive assessment of personal aspects of data subjects based on automated processing (profiling), extensive processing of special categories of personal data, etc. Such an impact assessment should include a description of processing procedures and their purpose, the assessment of necessity and proportionality, the risk assessment, as well as a description of measures taken to reduce the risk of processing. If the assessment of the effect on data protection has demonstrated that the processing would lead to high risk if the controller does not take measures to mitigate it, the controller is obliged to contact the supervisory body and, *inter alia*, provide information on the purpose and methods of processing, measures of protection, the impact assessment conducted, etc.

The Regulation provides an answer to a very important question, especially in Atlantic — the disclosure of personal data outside the EU. Personal data may be transferred from the EU to a third country only in accordance with the provisions of the Regulation. Personal data may be transferred to third countries for which the European Commission has issued a decision on adequacy (transfer based on a decision on adequacy) based on the assessment of the rule of law, respect for human rights, relevant legislation, the existence of an independent super-

visory body and the international obligations of the third country. In the event of the need for transfer of personal data to third countries which do not provide an adequate level of protection, additional protective measures, provided for in the Regulation, shall be adopted to provide a high level of protection of personal data. Instruments that enable personal data to be transferred to such third countries are exhaustively listed in the Regulation, e.g. binding corporate rules, standard contractual clauses, codes of conduct, etc.; also listed are exceptions relating to non-regular data transfer.

The complexity and importance of this issue in almost all companies that are engaged in the collection, processing and use of personal data in their business also implies the need to appoint officers who will deal solely with that matter. Thus, Article 37 of the Regulation lays down the possibility for each controller or processor to designate a personal data protection officer (*Data Protection Officer - DPO*), for these purposes. It also prescribes the mandatory appointment in the following cases:

1. public authorities or public bodies;
2. organizations that are involved in systematic monitoring on a large scale;
3. organizations dealing with extensive processing of personal information of sensitive nature and personal data on criminal cases;
4. cases where legal acts of an EU Member State or EU law impose the obligation to appoint a personal data protection officer.

The Regulation also allows a group of entrepreneurs to appoint a single data protection officer, who must then be easily accessible from each business headquarters. According to the current Croatian legislation, the controller of a personal data set that employs fewer than 20 workers may appoint a personal data protection officer, while a controller with more than 20 employees is required to do so.

Finally, in the event of a personal data breach that is likely to cause a risk to an individual's rights and freedoms, the controller is obliged to notify the supervisory authority (in the Republic of Croatia it is the Croatian Personal Data Protection Agency - AZOP)²

within 72 hours of the discovery of the breach, and notify the data subjects themselves without delay.

The processor is obliged to inform the controller about the incident without unnecessary delay.

3. Methodology of work

This paper covers theoretical considerations and a shortened form of secondary research, i.e. it uses the data from an analysis carried out at Atlantic. Therefore, the scientific methods used in this paper are defined by the characteristic of the individual parts of the research. In the preparation of the paper, the following scientific methods have been used in the appropriate combinations: methods of analysis and synthesis, the classification method, the description method and the compilation method. The latter was used carefully, with care taken over the faithful quoting and citing of the sources.

The previously defined problems and the set of research goals have yielded the following hypothesis, tested by the short research and analysis given in this paper:

HYPOTHESIS (H):

It is possible to avoid the burden of extremely high fines for non-compliance with the provisions of the Regulation by applying a structured and methodologically sound procedure, which will maximize the degree of compliance of all members of Atlantic Grupa d.d. with the legal provisions of the Regulation (GDPR).

4. Description of research and research results

4.1 The aim of research

The study used as secondary research in this paper was carried out on the example of Atlantic Grupa d.d., Zagreb. The competent authorities in the company have made the decision to establish the procedure of alignment with the provisions of the Regulation through a project approach.

This approach seemed necessary for many reasons. Primarily, the company involved is a business system with a large number of separate legal entities, with establishments and activities in several countries within and outside EU, conjoined by synergies and organizational processes.

Furthermore, companies within Atlantic carry out business activities in different fields, from the production of various types of food products (coffee,

soft drinks and bottled water, biscuits and chocolates, vitamin drinks...), food supplements, food intended for athletes, over the group's own chain of pharmacies and specialized stores, to the distribution of a wide range of own and principal brands. Finally, within Atlantic, a whole range of personal data sets is kept by individual companies (video surveillance, employee and working time records, members of *loyalty* clubs, participants of prize games, buyers ...).

The following information is a good illustration of the volume of personal information kept by companies within Atlantic:

- companies within the group employ 5,500 people;
- employee record of each employed person includes approx. 40 items of personal data, which means nearly 220,000 personal data items on employees alone;
- companies operating in the Atlantic system are collecting and have collected personal information on other natural persons through activities like prize games, *loyalty* programs, job offers, health clubs, convenience programs and discounts, etc. ... which amounts to the records containing ca. 700,000 additional personal data items.

As a conclusion, the fact is that Atlantic business system keeps almost 1,000,000 personal data items on natural persons.

4.2 Study findings

Before a structured approach to harmonization with the provisions of the Regulation was initiated, areas in which the existing situation needed to be established had been identified, and further steps and necessary measures defined.

Within Atlantic, four key areas have been identified: (I) **personal information** and all the ways in which it is collected, (II) **roles and responsibilities** in data management within the business system, (III) analysis of existing **policies and procedures**, and (IV) levels of **technical control**. In Figure 2 below, the project approach of alignment with the Regulation is being systematized and described.

Figure 2 Graphic presentation of the project approach of alignment with the Regulation

Technical controls	<ul style="list-style-type: none"> * Do our IT systems support the GDPR requirements? * What to do with them?
Policies and procedures	<ul style="list-style-type: none"> * Is personal data management integrated into the business processes? * Do we have procedures in place regarding the treatment of personal data?
Roles and responsibilities	<ul style="list-style-type: none"> * Who is responsible for personal data? * Do we have the appropriate roles and responsibilities?
Personal data	<ul style="list-style-type: none"> * What kind of data do we have? * How do we use it? * Where is it?

Source: Created by the authors

At the same time, when defining the project approach, the goals that need to be achieved through the individual phases of the project were identified:

- recording/mapping of personal data and databases;
- identifying and, if necessary, defining the legal basis for data collection and processing;
- development of Rules of Organization at the level of the Atlantic business system as the umbrella solution for all companies within the group;
- preparation of the basis for risk assessment and its implementation;
- defining the organizational and technical measures to ensure adequate measures of personal data protection;
- appointment of personal data protection officers;
- appointment of persons responsible for the protection of personal data for each process;
- developing a culture of personal data protection at all levels, and
- conducting the education of employees.

The project itself is defined through the implementation of certain phases. The implementation phases have been summarized and further described in Figure 3 below.

Figure 3 The graphic presentation of phases in the project of alignment with the Regulation

PROCESS OF ALIGNMENT WITH THE GDPR

<p>1. DEFINING THE AREA OF DATA PROCESSING</p> <p>Identify and understand where, why and how personal data is processed.</p>	<p>2. RISK ASSESSMENT</p> <ul style="list-style-type: none"> * Identify potential threats; * Determine the remaining risk; * Identify areas that are key to DPIA 	<p>3. DATA PROTECTION IMPACT ASSESSMENT</p> <ul style="list-style-type: none"> * Determine specific threats related to new technologies; * Analyze high-risk areas.
<p>4. GAP ANALYSIS</p> <ul style="list-style-type: none"> * Identify technical measures; * Identify organizational measures; * Asses efficiency of the measures in order to reduce the risks; * Determine the remaining risk – Is it acceptable or not? 	<p>5. ACTION PLAN</p> <ul style="list-style-type: none"> * Identify new or potential organizational and technical measures in order to reduce the risk to an acceptable level; * Define priorities and an action plan in order for the measures to be implemented. 	
<p>6. ALIGNED PRIVACY PROGRAM</p> <ul style="list-style-type: none"> * Define privacy, policies and procedures; * Implementation of technical measures; * Informing and training the staff involved in data processing area. 	<p>7. MONITORING PRIVACY ALIGNMENT</p> <ul style="list-style-type: none"> * Set up the alarms and warning systems; * Examine efficiency of the implemented measures; * Define mechanisms for identifying new risks in the privacy area. 	

Source: UMiUM d.o.o., available at: www.umium.hr (Accessed on: November 20, 2017)

The research included business areas in Atlantic where personal data processing in a significant volume had been identified:

1. Human Resources
2. IT
3. Sales
4. Pharmaceuticals
5. Marketing
6. Legal Affairs
7. Safety at work.

All personal data sets were identified in all of the above organizational units and the following data was processed within the risk assessment:

- the name of the personal data set;

- the type of data collected within the set (name, last name, year of birth, email address etc.);
- the legal basis for collection of personal data (consent, legal basis);
- the data storage method (in the IT system as a database, written documents, etc.);
- identification of the IT platform where data is stored, or the physical locations where documentation is kept;
- data on the person responsible for the personal data set.

Furthermore, a transparent methodology for risk assessment regarding the collected and identified (mapped) data was established as well as for determining the need for further activities, with the aim of their elimination or mitigation. An overview of the risk assessment regarding the collected data is given in Table 1 below.

Table 1 Risk assessment based on collected data

Impact	High	4	8	12	16
	Medium high	3	6	9	12
	Medium low	2	4	6	8
	Low	1	2	3	4
		Low	Medium low	Medium high	High
Probability					

Source: Created by the authors

Applying the methodology defined in this way, a risk rating for each individual set of personal data was established, together with the measures, deadlines and persons responsible for corrections. Based

on that rating, a comprehensive structural risk map with the measures, deadlines and responsible persons is being created. The example of such structural risk map is given in Table 2 below.

Table 2 Example of a structural risk map

Business area	Name of the risk	Description of the risk	Threat	Impact	Probability	Total Risk	Responsibility	Treating the risk	Treating the risk & action plan (description of controls implemented)	Established deadline	
Contact center	Limiting access to Sharepoint site for contact center, donations, and prize games	Access to the Sharepoint site is enabled for all employees who have an active AD account, which is not in compliance with the "need to know" principle	Leakage of personal data, penalty from the regulator	R,F	4	3	12	N.N.	Risk reduction	Restrict access rights to Sharepoint in accordance with the "need to know" principle	01/31/2018
Pharmacia	Unauthorized access to the Loyalty Web application	Unauthorized hacker break-in into Dietpharm and Pharmacy Loyalty Web Applications	Hacker attack	O,R,F	4	3	12	N.N.	Risk reduction	Conducting detailed penetration testing (involves the implementation of measures to reduce the observed defects during the test itself) at least once a year	02/28/2018

Source: Created by the authors

To summarize, the main risks to the protection of personal data in the Atlantic business system and, in parallel, measures for their removal/mitigation, have been identified as:

- limitation of access to the *Sharepoint* site by the contact center, donations and prize games;
- more detailed recording of activities of IT systems that contain personal user information;
- unauthorized access to the *Loyalty* web application;
- management of user consent;
- more advanced control of access to *Success Factors* and *Digital Ninja*;
- identifying real needs and limiting the access rights to data sets;
- data on users of personal computers;
- agreement at the level of Atlantic on processing of personal data within the entire group;
- education program on personal data protection for Atlantic employees;
- rules for protection of personal data.

Finally, it should be noted that, prior to the implementation of the project of alignment with the Regulation, and based on the explained methodology for risk assessment regarding the collected and identified (mapped) data, the final risk assessment in both identified areas has been set on the level of 12. The expected outcome of the risk assessment after the full implementation of the project of alignment with the Regulation is targeted to end at the level of 4. The risk estimated at the level of 4 would be a result of the medium low probability (2) and medium low impact (2). It is therefore self-explanatory that the implementation of the structured and in-house designed project of alignment with the Regulation should be considered as successful, workable and sustainable.

5. Discussion

As outlined in the previous sections of this paper, the new Regulation provides very clear and precise guidelines for accessing, recording, using, and managing the collected personal data. All controllers and processors must adapt to the guidelines and

rules and organize their processes and systems in the direction of maximum protection and transparency in the use and processing of personal data.

Systems and processes must be set up and organized so as to minimize the possibility of abuse of personal data, or breach by third parties into IT and other databases containing personal data. Furthermore, the structure of accountability, the right of access to and use of personal data must be clearly set and defined within each business entity. Quality education of all persons within the business entity who have access to, and use of, personal data of the data subjects, is very important, so that they are familiar with, and can act within, the legal provisions and the internal rules in a consistent manner.

It is also important to define the relationship with the contractual partners (processors) to whom the controller provides the collected personal data for processing, with a special emphasis on the definition of the obligations regarding the protection of the data and the way the data is used by the processors.

Also, it is sound policy to control any system from time to time, either through periodic internal control, or occasionally by external experts.

It is also very important to have an open and earnest relationship with the supervisory body and the data subjects themselves, to act on their requests within the legal deadlines, and to fulfill the obligation to notify the supervisory body, but also the data subject, in the event of a breach of the data subject's personal data.

Although the structured and in-house designed project of alignment with the Regulation would lower the risk assessment level from 12 to 4, and despite all the measures taken and the maximum of transparency in the system, the possibility of a breach or misuse in this area is always possible. With that in mind, the fact that an appropriate personal data protection and management system is in place within the business entity, and that its consistent application can be proved, will certainly be a good mitigating circumstance for the business entity involved. This is an investment that every business entity needs to make — to at least reduce the threat of penalty, if not to eliminate it altogether.

6. Conclusion

The Regulation represents a very significant advance in the area of personal data protection - from its modernization and upgrading, providing all EU citizens with a uniform right to protect their personal data, to the enabling of much greater control over the processing of such data, in particular in today's digital environment abundant with new technologies.

It introduces an additional dimension to the area of personal data protection, which was standardized to a notable degree even before the adoption of this Regulation — one aimed at raising the awareness of the necessity of respect and implementation of the prescribed measures. Namely, the penalties for the perpetrators of breaches of security are quite severe. For serious violations they amount to up to EUR 20 million, or 4% of the total annual (global) turnover. Such significant penalties will certainly provide additional motivation for all controllers and processors to achieve the maximum possible compliance with the provisions of the Regulation, and its consistent implementation.

Another important aspect is the great media attention raised by the novelty of the Regulation. It will certainly help increase the awareness of the data subjects themselves of their rights and of the pos-

sibility of control over the management of their personal data.

Based on everything stated in this paper, and in particular on the basis of:

- a very detailed theoretical elaboration of the issue of protection of individuals with regard to the processing of personal data and the free movement of such data,
- a transparent presentation of the current state of affairs in this area on the example of Atlantic, together with the targeted lowering of the risk assessment level from 12 to 4 and
- a description of a pragmatic, operational and feasible project plan that defines the areas, activities, risks, deadlines and persons responsible for the implementation of a comprehensive alignment of the Atlantic's rules with the provisions of the Regulation.

It can be concluded that **it is possible to avoid the burden of extremely high fines for non-compliance with the provisions of the Regulation by applying a structured and methodologically sound procedure that will maximize the degree of compliance of all members of Atlantic Grupa d.d. with the legal provisions of the Regulation (GDPR).**

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LIST OF ABBREVIATIONS

RH	-	Republic of Croatia
EU	-	European Union
GDPR	-	General Data Protection Regulation
AZOP	-	Personal Data Protection Agency
d.d.	-	Joint stock company

(ENDNOTES)

- 1 Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation — GDPR), available at: <http://eur-lex.europa.eu/legal-content/HR/TXT/PDF/?uri=CELEX:32016R0679&from=EN> (Accessed on: March 1, 2018)
- 2 Personal Data Protection Agency — AZOP (2017), "Guide to the General Data Protection Regulation", available at: <http://azop.hr/> (Accessed on: March 8, 2018)

Krešimir Starčević
Boris Crnković
Jerko Glavaš

IMPLEMENTACIJA OPĆE UREDBE O ZAŠTITI PODATAKA U TRGOVAČKIM DRUŠTVIMA U REPUBLICI HRVATSKOJ

SAŽETAK

U ovom radu obrađuje se aktualna tema zaštite pojedinaca u vezi s obradom njihovih osobnih podataka i slobodnom kretanju takvih podataka. Kako ovu materiju uređuje i zakonodavstvo Europske unije, u radu se opisuje i analizira doseg, implikacije te metode i alati za primjenu nove uredbe Europske unije usvojene 27. travnja 2016. u Parlamentu Vijeća Europske unije. Radi se o Općoj uredbi o zaštiti podataka, odnosno preciznije o Uredbi o zaštiti pojedinaca u vezi s obradom osobnih podataka i slobodnom kretanju takvih podataka (2016/679). Izvorni naziv ove uredbe na engleskom jeziku je *General Data Protection Regulation* (GDPR) pa se u svakodnevnom rječniku među poduzećima i gospodarstvenicima, ali i u ovom radu koristi još i naziv GDPR. Nadalje, u radu se analizira provedeno istraživanje o zatečenom stanju i načinu na koji se obrađuju i koriste svi prikupljeni osobni podatci svih dionika toga procesa u sustavu trgovačkoga društva Atlantic Grupa d.d., Zagreb. Osim toga, opisuje se usuglašeni projekt strukturiranog i metodološki ispravnog postupka primjene odredaba nove Uredbe, a u svrhu najvišeg mogućeg stupnja usklađenja obveza svih članica Atlantic Grupe d. d. s pravnom regulativom Uredbe (GDPR). Na kraju, obrazlaže se osnovni cilj opisanog projekta, izbjegavanje situacija koje bi dovele do naplate izrazito visokih propisanih novčanih kazni za nepoštivanje odredaba Uredbe.

Ključne riječi: zaštita pojedinaca i njihovih osobnih podataka, Opća uredba o zaštiti podataka (GDPR), Atlantic Grupa d. d.

REVIEW ARTICLES PREGLEDNI RADOVI

*Jelena Žugić, Aleksandar Konatar:
Comparative analysis of the value of national brands*

*Branka Remenarić, Ivana Kenfelja, Ivo Mijoč:
Creative accounting – Motives, techniques and possibilities of prevention*

*Katarina Marošević, Dijana Bošnjak:
Regional development and glocalisation: Theoretical framework*



Jelena Žugić

University Mediterranean Podgorica
Faculty of Business Studies
Josipa Broza bb,
81000 Podgorica, Montenegro
jelena.perovic@unimediterran.net
Phone: +38220409204

Aleksandar Konatar

NGO Institute for
Socio-Economic Analyses
Malo brdo bb,
81000 Podgorica, Montenegro
aleksandar.konatar.mbs@gmail.com
Phone: +38267850455

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COMPARATIVE ANALYSIS OF THE VALUE OF NATION BRANDS

ABSTRACT

Nation branding is not the “holy grail” of economic development, but it can provide a distinct advantage when it is aligned with a well-defined economic strategy and supported by public policy. A nation brand is the sum of people’s perceptions of a country across the most important areas of national competence. This paper examines the value of the nation brand on a sample of 108 countries, using the Anholt Nation Brands Index and using the mathematical formula for calculating the surface of Anholt’s hexagon for each country individually. In this paper, parameters are taken from six areas of the nation hexagon, from the World Bank and the UNESCO database. The surface of the nation hexagon was calculated with mathematical tools and comparative analysis was done between nation brands. By using strategic nation branding models designed by other branding experts in combination with a proposed mathematical model that shows the advantages and disadvantages of the nation brand of each country (and within the country), their competitiveness on the global stage is expected to improve.

Keywords: Nation brand, nation hexagon, competitive advantage, marketing, management

1. Introduction

Davis (2012) defines marketing, at a minimum, as “developing, building, and sustaining a positive reputation for a given offering so that it attracts support from members of a market place”. In fact, another new definition of marketing points to the brand, to positioning as well as to differentiation, since building the brand is the key (Žugić et al., 2017). The American Marketing Association (AMA) defines brand as a “name, term, design, symbol or any other feature that identifies one seller’s good or service as distinct from those of other sellers”, that is, a combination of characteristics intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of the competition¹.

The concept of nation branding was first coined by Simon Anholt in 1996, who has also become the most prolific author on this topic (Dinnie, 2008). Aronczyk (2013), Dinnie (2008) and Kaneva (2011, 2012) focused their researches more on particular nation branding campaigns from different countries. Nation branding includes a wide variety of activities, ranging from “cosmetic” operations, such as the creation of national logos and slogans, to efforts to institutionalize branding within state structures by creating governmental and quasi-governmental bodies that oversee long-term nation branding efforts (Anholt, 2008). Many pages have been written on place branding but one of the most prolific writers on “nation branding” is Anholt (1998, 2003 &

2007, among others). Simon Anholt considers a nation brand as “the most valuable asset: it is national identity made robust, tangible, communicable, and – at its best – made useful” (Anholt, www.super-brands.com)².

A nation does not provide services and does not offer tangible products. On the contrary, it includes a number of associations and factors such as: the place (geography, tourist attractions), natural resources and local products, people (race, ethnicity), history, culture, language, political and economic systems, social institutions, infrastructure, famous people (faces), or image (Žugić et al., 2017). A country brand may become an umbrella brand, ingredient brand or co-brand, intended to endorse certain economic sectors of a country (Dinnie, 2007)³. Also, country branding is influenced by the country’s image, reputation and positioning (Gilmore, 2002).

The nation brand is an important concept in today’s world. As a consequence of globalisation, all countries must compete with each other for the attention, respect and trust of investors, tourists, consumers, donors, immigrants, the media, and the governments of other nations. A powerful and positive nation brand provides a crucial competitive advantage. The nation brand is the sum of people’s perceptions of a country across six areas of national competence.

2. Nation branding concept

Many nations throughout the world have realised the significance of country branding. For example, Leonard (1997) wrote of the compelling need to rebrand Britain when he observed that there was a gulf between the reality of Britain as a highly creative nation and the world’s mental model of it as a backward-looking Island immersed in its heritage. Rather, every country wants to develop a distinct and winning brand with positive multifaceted attributes for economic growth and world influence. Brymer (2003) argues that with the emergence of the global market, abundant opportunities abound, but countries with unknown or poor reputation will be marginalized⁴.

For Nworah (2007), nation branding is “the process whereby a town, region, country (place) actively seeks to create a unique and competitive identity for itself, with the aim of positioning it internally

and internationally as a good destination for trade, tourism and investments.” For us, nation branding is the process of building and managing a country’s identity and image distinctly to attract and satisfy the needs of internal and external stakeholders, visitors and investors.

The concepts laid down by Anholt and other branding specialists have started to be given adequate consideration, since a country’s brand can genuinely determine its economic, cultural and political destiny, as well as international competitiveness (Nicolescu et al., 2008). Individuals are asked about their perceptions of other countries, which may be summarized by the following dimensions:

- Tourism: the country’s attractiveness from a tourism point of view.
- Exports: their perceptions and stereotypes about the products from the specific country.
- Governance: their perceptions as regards the government in that country.
- Investment and Immigration: their personal willingness to work in that country and their perceptions about social and economic conditions in that country.
- People: stereotypes about the people from the respective country as employees.
- Culture: perceptions about the country’s achievements in terms of culture, history and sports (Žugić et al., 2017).

Brands have a potential to elicit positive emotional responses in the average customer as a result of their use. National identity is a complex set of elements that includes the nation’s identity: its history, culture, legal and political system, geography, and its visual elements, such as flags and buildings that are its symbols.

On the other side, effective strategic brand management requires understanding brand equity and evaluating its impact when making brand management decisions. Brand equity is a “set of brand assets and liabilities linked to a brand, its name and symbol that adds or subtracts from the value provided by a product or service” (Aaker, 1991). Aaker (1991) proposed the following measures as means of capturing all the relevant aspects of brand equity: loyalty; perceived quality/leadership measures; associations/differentiation (perceived

value, brand personality, organization/association); brand awareness and market behaviour (market share). Dinnie (2008) defined the Asset-Based Nation Brand Equity (NBEQ) as comprising internal (innate or natured) and external (vicarious or disseminated) assets or liabilities of the nation. Innate assets are enduring elements of national identity: iconography, landscape (cities) and culture.

Even when a country does not deliberately manage its name as a brand, people retain images of countries that can be activated simply by a name (Kotler, Gertner, 2002). The strategic brand management model by Aaker (1996) provides a framework of the strategic brand management process consisting of a set of inter-related initiatives. The activities involved in the process are: developing brand identity; identity implementation; managing the brand over time; managing the brand portfolio; leveraging the brand; brand equity and strategic brand analysis.

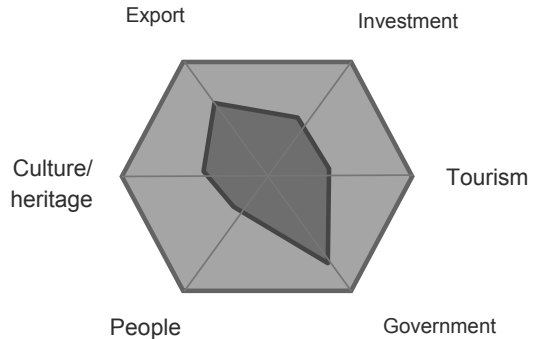
Another strategic management model for evaluating the brand life cycle is the Avrett Free and Ginsberg's seven steps planning cycle (Russell, Lane, 1999). The framework involves the following steps: brand/market status; brand mission/goals (future destination of the brand); strategic development; various options are evaluated to determine the strategy that will help to achieve the brand mission; strategy formulation that will be used in designing integrated marketing communication program; creative exploration; brand valuation; brand vision; brand equities generated through effective communication. Another corporate branding theory that can be applied in nation branding is the highest central common factor (HCCF), a four stage corporate brand differentiation process that starts with a review of corporate characteristics present in the firm's diversified business portfolio; followed by the identification of characteristics common to all business portfolio then an internal assimilation of the characteristics and in the end, the presentation of the characteristics to the external stakeholders by different kinds of Integrated Marketing Communications (IMC) tools (Otubanjo, Melewar, 2007).

3. Methodology

The original Anholt Nation Brand Index (NBI) is the average of the results obtained for all six dimensions, which are explored with three to five questions per area. The answers to the claims are given

on a scale from 1 to 7, where 1 is the lowest, 4 neutral and 7 the highest value. Anholt's NBI has six parameters: exports, investments, quality of public administration, people, culture and tourism. Figure 1 shows the NBI hexagon.

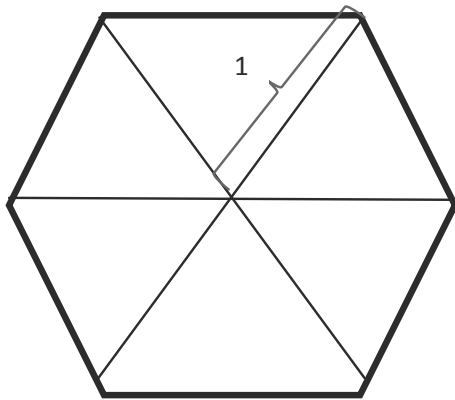
Figure 1 NBI hexagon



Source: Researchers' figure

The parameters used to compare the values of nation brands (using the Anholt hexagon) are taken from the World Bank and UNESCO databases for 2015^{5,6}. The sample contains a total of 108 countries. In this way, numerical values representing the values of the nation brand are obtained. They can be compared to each other and the position on the global market of all 108 countries from the sample can be determined. For the export measure, the share of country exports in the total world exports is taken; as the Investment parameter, the net inflow of foreign direct investments (FDI) is taken; the measure for the tourism is the arrival of tourists, the state administration is measured by the state government index published by the World Bank, weighted with the share of GDP of the state in the world GDP. Instead of the People parameter, the percentage of the registered population older than 15 years is taken, and for the Culture / Heritage parameter, the data on protected UNESCO areas is taken in the total number of areas protected by UNESCO. The resulting negative values in the table are replaced by zero. In this way, the brand values are obtained in the interval from 0 to 1 and can be represented by the surfaces on the correct hexagon, which are the sides of the triangles of length 1, as shown in Figure 2.

Figure 2 Hexagon with sides of triangle length 1



Source: Researchers' figure

On the basis of the data that comprise the six columns of the Anholt's hexagon, for each country individually, a certain area can be obtained which represents the assessment of the position of the nation brand. This assessment is relevant if it is compared with the values of other countries or if it is compared with the values of the same country from previous years. In order to calculate the surface of the hexagon, the surface of all six triangles that make it up should be calculated first. The surface of a triangle is $(\sin\alpha * a * b)$, in this case, the angle α is 60 de-

grees, so $(\sin60 * a * b) / 2$ is the surface of the body. When the surface of each triangle is calculated, the surface of the hexagon is obtained. Otherwise, the hexagonal surface consisting of 6 equilateral triangles with a length of 1 is 2.598.

A similar analysis has been done in economic literature, for example in the analysis of the nation brand of Nigeria (Odia, Isibor, 2014). Also, the analysis of the Nigeria environment was carried out on the basis of some selected key elements of a nation's brand image by adopting a combination of Anholt's (2007) Nation Brand Hexagon; Dinnie's (2008) NBEQ model and PEST model. The model in the present paper was constructed after a review of the strategic management models by Moilanen and Rainisto (2009), and Aaker (1991). Also, we have followed the suggestion that the development strategy of one country cannot be just copied (Kaklauskaset al, 2009; Karnitis, Kucinskis, 2009).

4. Results and discussion

As a result of the research, the numerical values that represent the rating of the nation brand are obtained. They can be compared to each other and their position in the world market can be determined. Table 1 shows countries whose national brand will be rated by Anholt's NBI for 2015.

Table 1 List of countries used as a sample for evaluation and comparison of nation brands

	Exports of goods and services (constant 2010 US\$)	Foreign direct investment, net (BoP, current US\$)	International tourism, number of arrivals	Political Stability and Absence of Violence/Terrorism: Estimate	Adult literacy rate, population 15+ years, both sexes (%)	Heritage
Albania	0.000249638	0.000628	0.004030616	0.00030987	0.98	0.003
Algeria	0.00304343	0	0.001668447	0	0.80	0.007
Armenia	0.00016046	0.000113	0.001163034	0	1.00	0.003
Austria	0.012602434	0.003281	0.026069721	0.03223511	1.00	0.008
Bangladesh	0.001524687	0.00214	0	0	0.61	0.003
Belarus	0.002073861	0.001046	9.95214E-05	0	1.00	0.004
Belgium	0.024486282	0	0.008151971	0.02025902	1.00	0.011
Brazil	0.014800551	0.047284	0.006152762	0	0.93	0.020
Bulgaria	0.001925018	0.001759	0.006926492	5.9937E-05	0.98	0.008
Cambodia	0.000621043	0.001077	0.004658966	0	0.78	0.002
Cameroon	0.000344666	0.000439	0	0	0.75	0.002
Canada	0.031255834	0.034629	0.0175343	0.14746708	1.00	0.017

	Exports of goods and services (constant 2010 US\$)	Foreign direct investment, net (BoP, current US\$)	International tourism, number of arrivals	Political Stability and Absence of Violence/Terrorism: Estimate	Adult literacy rate, population 15+ years, both sexes (%)	Heritage
Chad	0.000278381	0.00038	0.000116889	0	0.40	0.002
Chile	0.004944099	0.012958	0.004369183	0.00697227	0.97	0.006
Colombia	0.003083482	0.007427	0.002905634	0	0.95	0.007
Congo, Dem. Rep.	0.000742906	0.001059	0	0	0.77	0.000
Congo, Rep.	0.00055717	0.000941	0.000256609	0	0.79	0.001
Croatia	0.001533419	0.000101	0.012374799	0.00222089	0.99	0.009
Cuba	0.000838293	0	0.003406168	0.00282922	1.00	0.008
Cyprus	0.000775062	0.005071	0.002594386	0.00083864	0.99	0.003
Denmark	0.010440101	0.001196	0.010170694	0.02011153	0.99	0.007
Dominican Republic	0.000913241	0.00141	0.005463918	0.00077569	0.92	0.001
Ecuador	0.001270675	0.000837	0.001505505	0	0.95	0.005
Egypt, Arab Rep.	0.002338406	0.004358	0.00891692	0	0.76	0.006
Estonia	0.001101515	0	0.002916366	0.00095037	1.00	0.002
Finland	0.005480695	0.010723	0.002558285	0.01700825	0.99	0.007
France	0.046613869	0.022137	0.082399792	0.050148	0.99	0.040
Gabon	0.000502545	0.000395	0	4.0954E-05	0.83	0.001
Gambia, The	1.77445E-05	6.71E-06	0.000131719	9.863E-07	0.56	0.001
Germany	0.098916242	0.033283	0.034120219	0.1747482	0.99	0.038
Ghana	0.000886483	0.002021	0.000875203	8.6999E-05	0.77	0.002
Greece	0.004178683	0.000722	0.023025537	0	0.95	0.017
Guatemala	0.000739218	0.000744	0.00181968	0	0.79	0.003
Haiti	7.87235E-05	6.93E-05	0.000503461	0	0.61	0.001
Honduras	0.000488391	0.000834	0.000858616	0	0.88	0.002
Hungary	0.007621077	0	0.004809224	0.00691223	0.99	0.007
Iceland	0.000505592	0.000725	0.001257677	0.00127034	0.99	0.002
India	0.026455747	0.02786	0.012961195	0	0.72	0.033
Ireland	0.021096305	0.1288	0.009296467	0.01856771	0.98	0.002
Italy	0.034344582	0.008233	0.049499198	0.04673564	0.99	0.049
Jamaica	0.000239378	0.000586	0.00207141	8.5376E-05	0.88	0.001
Japan	0.053497262	0.003536	0.019257385	0.38679184	1.00	0.019
Jordan	0.000680797	0.000807	0.003669607	0	0.98	0.005
Kazakhstan	0.00364926	0.004168	0	0	1.00	0.005
Kenya	0.000521107	0.00091	0.001086929	0	0.78	0.006
Latvia	0.000932666	0.000483	0.001974816	0.00084566	1.00	0.002
Lebanon	0.000740688	0.001483	0.001481112	0	0.94	0.005
Liberia	2.23141E-05	0.000456	0	0	0.48	0.000
Libya	0.000724789	0.000459	0	0	0.91	0.005

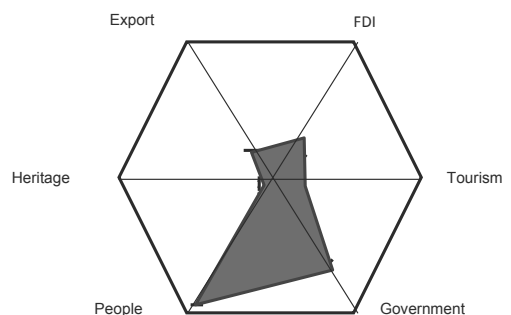
	Exports of goods and services (constant 2010 US\$)	Foreign direct investment, net (BoP, current US\$)	International tourism, number of arrivals	Political Stability and Absence of Violence/Terrorism: Estimate	Adult literacy rate, population 15+ years, both sexes (%)	Heritage
Lithuania	0.001950952	0.000614	0.002020674	0.00205924	1.00	0.004
Luxembourg	0.007321609	0.01557	0.001063513	0.00567332	1.00	0.001
Macedonia, FYR	0.000320946	0.000188	0.00047419	0	0.98	0.001
Madagascar	0.000209144	0.000328	0.000238071	0	0.65	0.003
Malawi	0.000369804	0.000328	0.000785438	0	0.66	0.002
Malaysia	0.013274707	0.00694	0.025095972	0.00416869	0.95	0.004
Mali	0.000168728	9.68E-05	0.000155429	0	0.33	0.004
Malta	0.000824784	0.00185	0.001739673	0.00072193	0.94	0.003
Mexico	0.023686315	0.021005	0.031313131	0	0.95	0.032
Moldova	0.000184617	0.000148	9.21061E-05	0	0.99	0.001
Mongolia	0.000414879	5.97E-05	0.00037662	0.00050114	0.98	0.004
Montenegro	0.000104383	0.000443	0.001522092	3.8271E-05	0.99	0.004
Morocco	0.002066022	0.002059	0.009929696	0	0.72	0.008
Mozambique	0.000263463	0.002449	0.001514286	0	0.59	0.001
Myanmar	0.001063411	0.002585	0.00456725	0	0.93	0.001
Namibia	0.000284576	0.000671	0.001354271	0.00063171	0.91	0.002
Nepal	0.000118158	3.29E-05	0.000525902	0	0.65	0.004
Netherlands	0.040303348	0.082137	0.014642326	0.0533701	0.99	0.009
Nicaragua	0.000241758	0.000601	0.00135232	0	0.82	0.002
Niger	7.53385E-05	0.000332	0.000131719	0	0.19	0.003
Nigeria	0.006038023	0.001981	0.001224503	0	0.60	0.002
Norway	0.009968951	0.003589	0.005230726	0.03528025	0.99	0.007
Oman	0.002331412	0	0.001850902	0.00329153	0.94	0.004
Pakistan	0.001206987	0.00062	0	0	0.56	0.006
Paraguay	0.000735924	0.0002	0.001184499	0	0.96	0.001
Peru	0.002395294	0.004949	0.003372018	0	0.94	0.011
Philippines	0.004890377	0.00357	0.005230726	0	0.97	0.006
Poland	0.014568931	0.008905	0.016315651	0.03215962	1.00	0.013
Portugal	0.005151899	0.001415	0.009715042	0.01314257	0.95	0.014
Qatar	0.005752712	0.000678	0.002858605	0.01078172	0.98	0.001
Romania	0.004616763	0.002733	0.009104254	0.0024473	0.99	0.007
Russian Federation	0.027252977	0.004338	0.032909376	0	1.00	0.024
Rwanda	7.65821E-05	0.000205	0.000963016	0	0.71	0.000
Saudi Arabia	0.016135501	0.005154	0.017556741	0	0.95	0.004
Senegal	0.00027075	0.000219	0.000982139	0	0.56	0.007
Serbia	0.001072265	0.001485	0.001104492	0.00060172	0.98	0.005
Singapore	0.031326205	0.04468	0.011758157	0.0234717	0.97	0.001
Slovak Republic	0.005462593	0.000729	0.001679179	0.00639373	0.98	0.006

	Exports of goods and services (constant 2010 US\$)	Foreign direct investment, net (BoP, current US\$)	International tourism, number of arrivals	Political Stability and Absence of Violence/Terrorism: Estimate	Adult literacy rate, population 15+ years, both sexes (%)	Heritage
Slovenia	0.00210614	0.001064	0.002641219	0.00298199	1.00	0.003
South Sudan	0.000107264	0	0	0	0.32	0.002
Spain	0.024954425	0.016015	0.066557356	0.02690881	0.98	0.043
Sri Lanka	0.000783612	0.000431	0.001754308	0	0.93	0.007
Sudan	0.000543004	0.001099	0.000722993	0	0.59	0.003
Sweden	0.014715543	0.005061	0.006324486	0.03448332	0.99	0.014
Switzerland	0.024189612	0.06177	0.009078886	0.05424187	0.99	0.011
Tanzania	0.000605176	0.001241	0.001077172	0	0.80	0.007
Thailand	0.014713103	0.0057	0.029195862	0	0.94	0.005
Togo	0.000138393	0.000163	0.000266366	0	0.67	0.001
Trinidad and Tobago	0.00060602	0.000257	0.000429308	0.00040671	0.99	0.000
Turkey	0.011414036	0.01111	0.038518673	0	0.96	0.015
Uganda	0.000236736	0.000669	0.001271337	0	0.74	0.003
Ukraine	0.002242663	0.001931	0.012125996	0	1.00	0.007
United Arab Emirates	0.019455579	0.005568	0	0.01797259	0.93	0.001
United Kingdom	0.043875378	0.037002	0.033599195	0.09871241	0.99	0.028
United States	0.122039195	0.240197	0.075626485	0.76686447	0.99	0.021
Uruguay	0.000656496	0.000867	0.002705615	0.00313046	0.98	0.002
Uzbekistan	0.000761196	0.000676	0	0	1.00	0.005
Vietnam	0.008711558	0.00747	0.007750959	0.00010902	0.95	0.007
Zimbabwe	0.000188916	0.000253	0.002007014	0	0.87	0.005

Source: <http://databank.worldbank.org/data/home.aspx>, <http://www.unesco.org/new/en/unesco/resources/online-materials/publications/unesdoc-database/>

Based on the parameters in Table 1, the values of the obtained parameters are entered into the hexagon. For example, if we take the data from the table above for the US: Exports of goods and services = 0.12, FDI = 0.24, International Tourism = 0.075, Political Stability and Absence of Violence/Terrorism = 0.76, Adult Literacy rate, population 15+ years = 0.99, Heritage = 0.021, when calculated on the basis of the obtained data, the surface of the body is 0,385. Such ratings of the value of the nation brand do not make sense until they are compared with the values of other countries. The calculated area of the body / hexagon for the USA is shown in Figure 3.

Figure 3 The surface of hexagon as the sum of the surfaces of six triangles



Source: Researchers' figure

Table 2 shows the hexagons and their six parameters on the example of ten countries. These countries have very strong and representative nation brands because they have realized that branding of nations acts as a catalyst for growth. Nation brand-

ing is crucial in order to attract investment, boost exports, and attract tourists and talented workforce. Also, their policy of nation branding has been able to extend the range of potential customers and of potential investors.

Table 2 List of 10 countries used as a sample for evaluation and comparison of nation brands

Country	Export	FDI, net	International Tourism	Political Stability and Absence of Violence/ Terrorism	Adult literacy rate	Heritage	Hexagon surface
United States	0.122	0.240	0.075	0.767	0.99	0.021	0.385
United Arab Emirates	0.019	0.005	0	0.018	0.93	0.001	0.008
United Kingdom	0.044	0.037	0.033	0.099	0.99	0.028	0.057
Spain	0.025	0.016	0.066	0.027	0.98	0.043	0.031
France	0.046	0.022	0.082	0.050	0.99	0.040	0.043
Italy	0.034	0.008	0.050	0.047	0.99	0.049	0.043
Turkey	0.011	0.011	0.038	0	0.96	0.015	0.006
Germany	0.099	0.033	0.034	0.175	0.99	0.038	0.097
Japan	0.053	0.003	0.019	0.387	1.00	0.019	0.179
Malaysia	0.013	0.007	0.025	0.004	0.95	0.004	0.003

Source: Authors' research

In the national hexagon the United States has people as the strongest parameter (adult literacy rate), then political stability and absence of violence/terrorism, as well as international tourism. The United States has projected its democratic, liberating brand throughout the world but some of its actions have damaged this reputation. Countries around the world have now started to realize that nation branding works as a catalyst for growth. In 2011, President Barack Obama launched "Brand USA" to attract more tourists and "Select USA" to attract more investment. For example, the United States' sponsorship of youth soccer, Turkey's reliance on coffeehouse-style discourse, Japan's comic competitions, and Britain's emphasis on arts and education seem ideal and humane compared to hard-hitting diplomatic efforts reliant on power dynamics and threats (Kanji, 2016).

Japan has a hexagon surface of 0.179 and its adult literacy rate is larger than the United States, and has a very high level of heritage and political stability and the absence of violence/terrorism, which are the hexagon's main pillars for nation branding. The most salient example of the soft diplomacy phenomenon is Japan's "Pop Culture Diplomacy". The Japanese government's program uses anime (animated cartoons)

and manga (a style of comic) in an attempt to achieve foreign policy goals. The Japanese government asserts that the worldwide promotion of manga and anime through competitions and festivals serves the purpose of furthering "understanding of and trust in" Japan. The initiative began in 2007 with the establishment of the International Manga Award. The manga is called a "gateway" to Japanese culture: a widespread, popular form of media that could serve to introduce foreigners to deeper, less-known aspects of Japanese society (Ibid).

For example, although the United Arab Emirates have a small hexagonal surface, their strongest asset is the Dubai city, which promises luxury. It started delivering on this promise in 1999 with the opening of the Burj Al Arab, often referred to as the only seven-star hotel in the world. In 2007, the emirate reinforced its positioning strategy by building the Burj Khalifa, the tallest tower in the world that houses the first and only hotel designed by Giorgio Armani. The new brand identity was consistently managed even during the financial crisis, when the temptation to diversify was omnipresent. Nation branding strategically steers the image of a country in order to stimulate tourism, increase trade, or attract companies and foreign direct investment (FDI).

Britain has been striving to strengthen its international relationships through the arts. The British Council heads up several art- and education-based initiatives centered around British culture. Art and popular culture are elevated to a place of serious practical importance – not only do they matter to the preservation of national heritage, they are now elements of weighty foreign policy.

Turkey's position as the only secular democracy in the Muslim world is that it has free and fair elections, a free press, and a free market economy. Turkey has an international image: there is more to Turkish culture than "carpets and the sea." The perception of a country has an important impact on several issues, such as attracting foreign investment and wielding political influence.

When it comes to Spain, its very strong parameter in the national hexagon is tourism. In 2012 'Brand Spain' was created in order to achieve a better promotion of tourism in Spain and to improve Spain's positioning in the global market (Blanco-Gomez, 2013). The Ministry's webpage defines it as follows: Spain Brand is a state policy whose efficacy will be proven in the long term. Its objective is to improve the image of our country domestically and abroad since in a globalized world, a good country image is an asset that helps to support the international position of a political, economic, cultural, social, scientific and technological state. Brand Spain attempts to promote all of Spain's positive characteristics (history, art, culture in general, international fairs, religion, beach and sun tourism, sports, cuisine, etc.) at an international level, which will attract more tourists and will contribute to boosting exports, to attracting foreign investment, which in short will make a contribution to Spain's economic recovery, since as Kotler & Gertner (2002) highlight,

'A country's image results from its geography, history, proclamations, art and music, famous citizens and other features.' On the other hand, Loo & Davies (2006) consider that the nation brand could have been developed deliberately or by default, formed from countless different sources, such as word of mouth, education, mass media, travel, product purchases and dealings with its people.

A similar situation is with Malaysia. In 1999, the Malaysia Tourism Promotion Board took action and launched the "Malaysia: Truly Asia" campaign. "Malaysia: Truly Asia" is a classic example of a nation branding campaign focused on tourism, but the development of a nation brand is no longer the exclusive domain of tourism authorities. In an era of continuing globalization and increased competition between countries, investment boards and trade promotion agencies find that they have to go beyond merely creating the conditions for industries to prosper, since rival states can easily imitate these factors. It has become apparent that countries need to find a unique and sustainable competitive edge that is aligned with economic strategy and supported by public policy. A well-defined brand strategy helps countries gain a strategic long term brand advantage (van Garderen, 2014).

France uses its brand advantage instead of depending on major promotional campaigns. At a minimum, the country evokes images of the Eiffel Tower, wine, and fashion. These solid brand associations drive tourists to visit the "city of love", motivate consumers to pay premium prices for a bottle of Bordeaux, and attract fashionistas to shop for the latest trends.

Table 3 shows the hexagons and their six parameters on the example of some of the countries of South-East Europe.

Table 3 List of some South-East European countries used as a sample for evaluation and comparison of nation brands

Country	Export	FDI, net	International Tourism	Political Stability and Absence of Violence/Terrorism	Adult literacy rate	Heritage	Hexagon surface
Slovenia	0.0021	0.001	0.0026	0.003	1	0.003	0.0025
Croatia	0.0015	0.0001	0.0123	0.0022	0.99	0.009	0.005
Montenegro	0.0001	0.0004	0.0015	0.00004	0.99	0.004	0.002
Macedonia	0.0003	0.0002	0.0005	0	0.98	0.001	0.0004
Serbia	0.001	0.001	0.001	0.0006	0.98	0.005	0.002
Albania	0.0002	0.0006	0.004	0.0003	0.98	0.003	0.0013

Source: Authors' research

When it comes to South-East Europe, according to the calculated area of hexagons and taken parameters, Croatia has the best nation brand and Macedonia has the worst nation brand. When it comes to export, as one of the parameters of building a nation brand, it is the largest in Croatia and Serbia, and the smallest in Montenegro. The net FDI inflow is the highest in Slovenia and Serbia, and the smallest in Croatia, which means that countries with lower FDI inflows should create their economic strategies to focus on improving the investment environment and strengthening the rule of law. Political stability and absence of violence/terrorism is the highest in Slovenia and the lowest in Montenegro and Macedonia. The parameter of the heritage is the largest in Croatia, since Croatia has an array of strategies for cultural branding, or puts communication at the heart of the customer-consumer value. It is about creating a story around a product or brand through which the user-consumer experiences the product identity.

In this context, Anhol's hexagon with export, tourism, governance, investments, people and culture in synergy, including calculating the surface area of the country's hexagon and analysis of the obtained parameters relative to other parameters or in relation to other period of time has a great importance for branding and developing a recognizable image of the country.

5. Conclusions

As Kotler & Keller (2006) state, 'positioning' is the act of designing the company's offering and image to occupy a distinctive place in the mind of the target market. A nation brand could be described as the total sum of all perceptions about a country or nation in the mind of international stakeholders (Fan, 2006). In a more complex approach, nation branding is influenced by the country image, reputation and positioning – if this is the case (Gilmore, 2002), nation branding is in some cases similar to corporate branding, which implies the usage of similar branding techniques.

In this paper, parameters were taken from six areas of the nation hexagon, from the World Bank and UNESCO databases. The value of the nation brand was calculated by using the mathematical model, and comparative analysis was done between nation brands. In addition, an analysis was carried out within a particular country, in terms of identification of the strongest and the weakest parameters. It indicates which further steps or strategies the country should take in order to enhance its competitive position and economic development. Including the calculation of the surface area of the hexagon and the analysis of the obtained parameters in relation to other parameters or in relation to another period of time is very important for country branding and creation of its recognizable image. Further steps or strategies that a country should take in order to strengthen its competitive position and accelerate its economic development will depend on the obtained data. It has become apparent that countries need to find a unique and sustainable competitive edge that is aligned with their economic strategy and supported by public policy. A well-defined brand strategy helps countries gain a strategic long term brand advantage (van Garderen, 2014).

Having considered strategic nation branding models designed by other branding experts, we proposed a new measurement of nation's brand image. Further empirical research that would utilize the proposed framework in determining the image of these nation brands is recommended. By using strategic nation branding models designed by other branding experts in combination with a proposed mathematical model that shows the advantages and disadvantages of the nation brand of each country (and within the country), their competitiveness on the global stage is expected to improve. It is becoming significant to explore the potential of other sectors and acknowledge the importance of nation branding as a stimulus for the economy. The decision makers and the population alike wish that high income and prosperity become a part of the national image.

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Jelena Žugić
Aleksandar Konatar

USPOREDNA ANALIZA VRIJEDNOSTI NACIONALNIH BRENDOVA

SAŽETAK

Nacionalno brendiranje nije „sveti gral“ gospodarskog razvoja, ali može pružiti izuzetnu prednost kada se uskladi s dobro definiranom ekonomskom strategijom i kada je podržano javnom politikom. Brend nacije je zbroj ljudskih percepcija zemlje na najvažnijim područjima nacionalne nadležnosti. Ovaj rad istražuje vrijednost nacionalnog brenda na uzorku od 108 zemalja, koristeći indeks *Anholt Nation Brands* i koristeći matematičku formulu za izračunavanje površine Anholtovog šesterokuta za svaku zemlju pojedinačno. U ovom radu parametri su uzeti iz šest područja na koja se odnosi nacionalni šesterokut, iz baze podataka Svjetske banke i UNESCO baze podataka, a površina šesterokuta svake nacije izračunata je matematičkim alatima i učinjena je usporedna analiza između brendova nacija. Korištenjem strateških modela brendiranja koje su dizajnirali drugi stručnjaci za brendiranje u kombinaciji s predloženim matematičkim modelom koji pokazuje prednosti i nedostatke nacionalnog brenda svake zemlje (i unutar zemlje), možemo očekivati poboljšanje njihove konkurentnosti na globalnoj razini.

Ključne riječi: nacionalni brend, nacionalni šesterokut, konkurentna prednost, marketing, menadžment

Branka Remenarić
Zagreb School of Economics
and Management
Jordanovac 110,
10000 Zagreb, Croatia
branka.remenaric@zsem.hr
Phone: +38512354151

Ivana Kenfelja
Zagreb School of Economics
and Management
Jordanovac 110,
10000 Zagreb, Croatia
ivana.kenfelja@zsem.hr
Phone: +38512354151

Ivo Mijoč
Josip Juraj Strossmayer
University of Osijek
Faculty of Economics in Osijek
Trg Ljudevita Gaja 7,
31000 Osijek, Croatia
ivo.mijoc@efos.hr
Phone: +38531224415

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CREATIVE ACCOUNTING – MOTIVES, TECHNIQUES AND POSSIBILITIES OF PREVENTION

ABSTRACT

Creative accounting can be described as an accounting practice that may or may not follow the accounting standards and principles. However, it deviates from the main idea of those standards and principles in order to present the desired picture of the business. Creative accounting is not illegal, but unethical since it doesn't meet the main objective of financial reporting – to present fair and objective picture of the business. The practice of creative accounting usually includes overstating assets, high stocks, decreasing expenses, changes of depreciation methods, or presenting provisions as an asset. Creative accounting techniques follow the changes of accounting standards, which are modified in order to reduce financial information manipulation. However, such changes in accounting standards often result in new opportunities for accounting manipulation. Although entities follow the accounting standards, they also use “loopholes” to enhance key financial ratios. Therefore, it is very important to adopt measures that will prevent the abuse of creative accounting practices. The aim of the paper is to present the main motives for financial information manipulation, as well as the most common techniques, and finally the measures that have to be taken in order to minimize creative accounting practices.

Keywords: Creative accounting, earnings management, accounting manipulations, financial statements

1. Introduction

Financial statements are the mirror of every company's business. They also represent a medium through which information on the financial position and business success of a company are communicated, primarily to external interest groups, which make different decisions based on such information. In order to be able to make the right decisions, the information contained in financial

statements must be accurate and reliable. However, companies nowadays are increasingly resorting to “cooking” financial statements in order to present a more attractive business image and attract as many investors as possible. This is precisely why the concept of creative accounting has appeared. In other words, there is a distortion of financial information and presumptions of accuracy and reliability are brought into question.

Increasing competition and the economic environment are just some of the reasons why companies resort to various accounting manipulation techniques, with the aim of concealing possible losses and presenting the business in the best possible light. This does not necessarily mean that there is violation of accounting standards and legal regulations, but the so-called “loopholes” in laws are used to present a better image of the business. It should be noted that the practice of creative accounting is not illegal – which is why auditors often neglect it, but these are unethical procedures.

The aim of this paper is to analyse the results of recent research on the topic of creative accounting and to present the main conclusions. The most commonly used methods of creative accounting will be shown, as well as possible solutions that would contribute to minimising the manipulation of financial information and encourage companies to act in accordance with basic ethical standards.

2. The concept of creative accounting

Accounting is one of the basic functions of each company. The financial information that it provides is very important for both managers and decision-makers outside the company. The basic objective of financial reporting is to provide a fair and objective picture of the business to all interested stakeholders. This can often lead to a conflict of interest. Namely, on the one hand, investors expect reliable and credible financial information so that they can make the right decisions. On the other hand are the companies that, due to increasing competition and economic conditions, are seeking to attract investors, because of which they often resort to unethical methods of creative accounting, that is, management of earnings.

There are various definitions of creative accounting in the literature, but they all boil down to the same idea. Bhasin (2016) describes creative accounting as an accounting practice that may (or may not) adhere to accounting principles and standards, but deviates from what those principles and standards intend to achieve, in order to present the desired business image. In other words, creative accounting is the process of transforming accounting information from what it actually is to what the company wants it to be, using the benefits (or loopholes) in the existing rules or by ignoring part of the rules.

Creative accounting can also be described as a series of actions initiated by the company's management that affect the reported business result, which,

however, do not bring true economic benefits to the company, but can instead result in great damages in the long term (Merchant, Rockness, 1994). Shah (1998), in turn, defined creative accounting as a process in which managers utilise the so-called loopholes and ambiguities in accounting standards to demonstrate financial success in a biased manner.

Since creative accounting often does not violate legal rules, the question is whether it is good or bad. This depends on the basic purpose for which it is used and the manner in which it is applied. Bhasin (2016) describes it in a very picturesque way: creative accounting is like a double-edged sword – management can either use it in a positive sense, or it can abuse it. Thus, the idea to present the business in a better light can ultimately result in a total loss of company image.

The use of creativity in financial reporting can be described as playing with the elements of financial statements. Doing so may result in overestimation of the value of assets, high inventory levels, reduction in expenditures, changes in depreciation methods, showing provisions as assets, etc. (Shahid, Ali, 2016). The techniques of creative accounting follow the changes of accounting standards, which are modified with the aim of reducing accounting manipulation. However, well-intended changes in accounting standards often result in opening up of new opportunities for accounting manipulations. Although companies apply accounting standards, at the same time they use “loopholes” to enhance the key indicators (Karim et al., 2016).

Creative accounting can have a positive impact on a company's business in the short term, but in the long run it may result in decreased stock prices, insolvency, and even bankruptcy. It is the root of numerous accounting scandals, as well as many accounting reforms, which is why doubts in the transparency and honesty of financial reporting arise. For this reason, Bhasin (2016) emphasises the role of forensic accounting. Moreover, he points out that forensic accounting will be on the list of 20 most important and sought-after professions of the future.

3. Overview of recent research

Bhasin (2016) points out that many dimensions of creative accounting have been analysed in previous research, but that no one has actually investigated what the people who prepare financial statements think about creative accounting, as well as their users. Based on this, a survey was conducted in India, which showed that the majority of respondents

believe that creative accounting has adverse effects on financial reporting and that it is quite difficult to detect. Nevertheless, opinions are divided as to whether the practice of creative accounting is legal or not. The persons responsible for manipulating financial information and applying creative accounting are mainly managers and accountants, and the main motives for these practices are the benefits of manipulators, increasing competition and attracting foreign investment. Methods of financial statement manipulation most frequently include off-balance sheet financing items, changes in accounting policies and depreciation methods, other income and expenses, and changes in the value of money. Research has shown that a well-established accounting framework plays a key role in limiting creative accounting, and accounting standards should therefore be adapted accordingly in a way that limits the leeway of managers to decide between several accounting methods. Misuse of estimates in accounting can be reduced by a simple rule that an initially determined accounting policy must be used in all future similar circumstances, which would minimise the use of estimates and achieve consistency. It is also important to highlight the role of internal and external auditors in identifying and reporting unfair estimates, and emphasise the responsibility of detecting and preventing accounting manipulations. Auditors have to be changed periodically, they must not work under pressure from management, and it is necessary to hire independent directors and members of the audit committee, which are selected by shareholders. Companies need to integrate and promote accounting rules and regulations that will disallow individuals to find "loopholes" and thus gain benefits. Finally, companies should have a developed whistleblower policy to protect people who report financial irregularities to the top management.

Karim et al. (2016) conducted a survey on the existence of a gap between accounting and auditing perceptions of creative accounting, and possible solutions to regulate such practices in Bangladesh. The survey has shown that there is no reason to punish either auditors or accountants for applying creative accounting. Accountants are only company employees that follow management instructions. Therefore, if management demands that financial statements are prepared in a certain way, accountants will primarily be concerned about keeping their jobs, and will follow the instructions accordingly. Therefore, management should be held criminally liable for the abuse of creative accounting. Accountants and auditors believe that national accounting authorities should give

more attention to the code of ethics for accountants, which would have a positive impact on reducing the use of accounting manipulations. Based on the conducted research, it follows that the solution to the abuse of creative accounting lies in the imposition of penalties by national authorities, practicing forensic accounting in order to monitor such practices, emphasising the code of ethics for accountants, and raising investors' awareness of such practice.

Lau and Ooi (2016) conducted a study on fraudulent financial reporting in Malaysia, focusing on the creative accounting methods used and the motives for such actions. The research results showed that the most commonly used method of creative accounting was the overestimation of revenues through recognition of fictitious revenues from product sales to bogus customers. The main motive for this is increasing the company's capital, not settling debts and maintaining the level of capital. One of the key conclusions of the research is that auditors should review the effectiveness of their analytical and material procedures since there is a significant number of cases of creative or fraudulent accounting that remain undetected by the audit process. Also, the bodies that set accounting rules should reconsider whether managers have too much discretion in the application of accounting standards. In other words, the question arises whether they use this discretion to provide useful information to the decision-makers or to obtain personal gain. It turned out that in most accounting scandals, unethical decisions of managers have led to significant adverse consequences for decision-makers and society as a whole. Therefore, managers should re-examine their own responsibilities and role in financial reporting.

Furthermore, Alzoubi (2016) analyses the connection between company management and earnings management in Jordan. He arrived to the conclusion that ownership structure has a significant influence on earnings management. Thus, managerial ownership, institutional ownership, shareholders, as well as family and foreign ownership affect the quality of financial reporting, because they greatly reduce the ability to manage earnings.

Write-off management is one of the frequently used creative accounting tools. Based on a study conducted in South Korea, Lee (2016) came to the conclusion that write-off management is the ideal item for manipulating accounting information because it is based on management's estimates. Companies usually manipulate write-offs of receivables to avoid reporting losses, to maintain an equal level of earnings over the years, and to meet the analysts' forecasts.

Mindak et al. (2016) investigated whether companies use creative accounting techniques to meet the analysts' forecasts and exceed last year's earnings and whether the market rewards or punishes such manipulations. The conducted research has shown that all the companies that have managed to beat the targets have used creative accounting methods to artificially increase earnings and have been rewarded by the market for doing so. In contrast, companies that have managed earnings in order to reduce them (by increasing reserves, for example), so that they barely meet the set goals, were not rewarded. The reason is that most of the targeted earnings are actually determined by analysts' forecasts – so the most important goal of earnings management is to beat the forecasts, because companies that succeed in doing so are considered "good" companies. Thus, companies trying to maintain the same level of earnings over the years are not considered "good" since they do not surpass the expectations.

Inaam and Khamoussi (2016) have explained the association between audit committee and audit quality itself and the practice of earnings management. The basic function of corporate governance in financial reporting is to ensure compliance with accounting standards, and to provide reliable and credible financial information in financial statements. Therefore, good corporate governance should ensure effective controls and prevent unethical management behaviour. Although it is to be assumed that quality corporate governance, audit committees and quality audit implementation affect the limited use of various earnings management techniques, this study showed a negative relationship with the practice of earnings management.

Research carried out by Shahid and Ali (2016) showed that creative accounting has a significant impact on fair and objective financial reporting in Pakistan. In order to prevent the manipulation of financial information, it is necessary to put emphasis on corporate governance and the strengthening of ethical values. Limited and minimal use of creative accounting in a positive sense should actually not affect the quality of financial reporting.

Since most research in the field of creative accounting tries to explain how it affects business, Goel (2017) conducted a study on the impact of creative accounting on stock prices in the market. The results showed that companies use accruals for manipulating financial information, most often in periods when financial markets are uncertain about the prospects of the business of such companies in the future.

4. Motives, techniques and methods of limiting creative accounting

The basic idea of creative accounting is based on finding the so-called loopholes in laws and accounting standards with the intention of enhancing financial statements and presenting the business in a positive light. Creative accounting can have a positive impact on business, but only when it is applied in a positive sense and in a minimal scope. However, it often happens that companies cross boundaries of minimalism and abuse such practice, which can lead to fatal consequences. One thing is certain, creative accounting most often has a negative effect on financial reporting.

In most cases, company management is responsible for the manipulation of financial reporting, as their instructions are followed by the employees responsible for financial reporting. The main motives for applying creative accounting are:

- obtaining personal gain;
- competition;
- attracting investors;
- increasing or maintaining the level of capital;
- buying time for not settling debts;
- beating analysts' forecasts about future company performance.

In order to present their business in the best possible light, companies use various techniques to manipulate financial information. Manipulations usually occur where accounting standards require accounting estimates. The most widely used creative accounting techniques are:

- manipulation of off-balance sheet financing items;
- changes in accounting policies and depreciation methods;
- manipulation of other income and expense items;
- changes in the value of money;
- overestimation of revenues by recording fictitious sales revenues;
- manipulation of receivables write-offs;
- manipulation of accruals.

Since creative accounting is increasingly being used in a negative sense, resulting in numerous accounting scandals with huge consequences, it is neces-

sary to establish efficient methods that will limit or minimise manipulation of financial information. Efficient techniques for preventing creative accounting include:

- adaptation of accounting standards in terms of limited use of estimates and consistency in the application of accounting methods;
- recognising and insisting on the role of internal and external audit in identifying and reporting unfair estimates, and preventing accounting manipulations;
- change of audit service providers from one accounting period to another;
- hiring independent directors and members of the audit committee;
- establishing effective corporate governance controls;
- company persistence in developing a whistleblower policy;
- continuously making employees aware of the code of ethics;
- placing emphasis on the development and application of forensic accounting;
- making investors aware of the practice of manipulating financial information;
- consistent enforcement of penalties by national authorities.

5. Conclusion

Financial statements are used to communicate the business, expressed in figures, to all interested stakeholders. The main objective of financial reporting is to provide a fair and objective picture of the business, taking into account the fundamental accounting principles and assumptions. However, accounting standards often allow and require various accounting estimates, which can lead to manipulation of financial information.

Creative accounting can be described as a process in which managers exploit “loopholes” and ambiguities in accounting standards to demonstrate financial success in a biased manner. Looking at the short-term, manipulating financial information can have a positive impact on business. But in the long run, it usually results in a fall in stock prices and bankruptcy.

Most often, managers are the ones responsible for manipulating financial information, as it is they who provide guidance to their subordinates regarding financial reporting. The main motives for this are obtaining personal gain, attracting investors by presenting a false image of their business, struggle with the competition and economic conditions, increasing capital, buying time because of unpaid overdue liabilities, and beating analysts’ forecasts regarding business performance so as to achieve overall benefit for the company.

In order to present business in a positive light, companies use various methods of creative accounting. The basis for manipulative procedures lies in accounting estimates that are permitted within accounting standards. The techniques used in creative accounting relate to manipulation of off-balance sheet financing items, changes in accounting policies and depreciation methods, manipulation of other income and expense items, changes in the value of money, overestimation of revenues by recording fictitious sales revenues, manipulation of receivables write-offs, and manipulation of accruals.

If it is implemented in a minimal scope and with positive intent, creative accounting can be considered good practice. But since it is often misused, it is necessary to insist on measures that will minimise the practice of manipulating financial statements in order to prevent false financial reporting. Such measures include adaptation of accounting standards in the sense of limiting the use of accounting estimates, and establishing consistency in the application of accounting methods. It is necessary to recognise the role of internal and external audit in identifying and reporting unfair estimates, and preventing accounting manipulations. Moreover, it is desirable to use services of different auditing companies in different accounting periods. Additionally, it would be good for companies to hire independent directors and members of the audit committee, establish effective corporate governance controls, persist in developing a whistleblower policy, and continuously work on raising employees’ awareness of the code of ethics. It is also necessary to raise awareness of investors about the application of creative accounting practices and persist in the development and application of forensic accounting. Furthermore, national authorities should consistently enforce penalties.

Finally, the use of creative accounting certainly cannot be completely removed, but it can be minimised using various solutions.

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*Branka Remenarić
Ivana Kenfelja
Ivo Mijoć*

KREATIVNO RAČUNOVODSTVO – MOTIVI, TEHNIKE I MOGUĆNOSTI SPRJEČAVANJA

SAŽETAK

Kreativno računovodstvo predstavlja računovodstvenu praksu koja može, ali i ne mora slijediti računovodstvena načela i standarde, pri čemu odstupa od njihove osnovne ideje, s ciljem prikazivanja željene slike poslovanja. Kreativno računovodstvo nije ilegalno, ali se smatra neetičnim jer ne zadovoljava osnovni cilj financijskog izvještavanja – ne prikazuje poštenu i objektivnu sliku poslovanja. Praksa kreativnog računovodstva obično podrazumijeva precjenjivanje vrijednosti imovine, visoke razine zaliha, smanjenje rashoda, promjene metoda amortizacije, te iskazivanje rezerviranja kao imovine. Tehnike kreativnog računovodstva se mijenjaju kako se mijenjaju računovodstveni standardi, a oni se pak mijenjaju s ciljem smanjenja računovodstvenih manipulacija. Međutim, nerijetko dobronamjerne promjene računovodstvenih standarda rezultiraju otvaranjem novih mogućnosti za računovodstvene manipulacije. Iako poduzeća slijede računovodstvene standarde, istovremeno se koriste „rupama“ kako bi uljepšali ključne pokazatelje. Zbog toga je potrebno donijeti mjere kojima će se spriječiti zlouporaba kreativnog računovodstva. Cilj rada je prikazati glavne motive za manipuliranje financijskim informacijama, tehnike koje se pritom koriste, te mjere kojima bi se praksa kreativnog računovodstva mogla minimizirati.

Ključne riječi: kreativno računovodstvo, upravljanje zaradama, računovodstvene manipulacije, financijski izvještaji

Katarina Marošević
Josip Juraj Strossmayer
University of Osijek
Faculty of Law Osijek
Stjepana Radića 13,
31000 Osijek, Croatia
katarina.marosevic@pravos.hr
Phone: +385989224276

Dijana Bošnjak
Olajnica 1/38,
32000 Vukovar, Croatia
dbosnjak911@gmail.com
Phone: +385989064361

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REGIONAL DEVELOPMENT AND GLOCALISATION: THEORETICAL FRAMEWORK

ABSTRACT

The importance of regions and regional development in modern economies is unquestionable. In this context, the paper aims at elaborating the term of regional development from various angles and in relation to frequently used terms in this respect. It focuses on discussing the necessity to grant smaller units the power and respect the principle of subsidiarity as well as to accept the model of functional regionalisation. By respecting the principle of subsidiarity, local and regional self-government units are allowed operational space for starting regional development, which can be viewed as globalisation adjusted to the conditions at the local level.

Additionally, the paper gives a few positive innovative examples of initiating development and discusses several suggestions for underdeveloped regions in the Republic of Croatia. For instance, the geographical distance of Eastern Croatian counties from the City of Zagreb is much smaller than the actual geographical distance of some other counties (e.g. Dubrovnik-Neretva County), but in the context of the development level, "distance" is much bigger. The paper, thus, points out the need for decentralisation, utilisation of the potential in the counties of Eastern Croatia by starting new businesses and through reindustrialisation.

Keywords: Regional development, glocalisation, regionalisation, regionalism, decentralisation

1. Introduction

Regional development and regional differences have been the topics of discussion for many researchers not only at national (Čavrak, 2002; 2003; Mecanović, 2003; Dragičević, Letunić, 2008; Lovrinčević et al., 2005)¹ and international level (Pike et al., 2010; 2014; Stimson et al., 2011; Capello, 2016; Huggins, 2016), but also at national and international institutional level (World Bank², 2012; Račić, Švarc, 2015; Analytical Base for Regional Development Strategy of the Republic of Croatia³, 2015; The Strategy of Croatian Regional Development by 2020⁴, 2017). There are numerous reasons that potentially lead to different research approaches of the term 'region-

al development' and of regional differences; they mostly conditioned by a starting point in a particular field of study.

The goal of this paper is to distinguish the terms region, regionalisation, regionalism and regional development. Furthermore, the goal is to give suggestions linked to possibilities of local and regional economic development. Regions, regional development and other related terms can refer to local levels and development, but also to levels broader than national levels. An attempt has been made, thus, to link regional development to global changes reflected as globalized effects, as well as to local conditions and processes as a driving force of the development as a

whole. Glocalisation is both a notion and a process; it encompasses the local and global development and exemplifies the resistance to global influences.

2. Theoretical framework: Basic terms and concepts

The scope of the problem area concerning regional development requires a range of terms. Thus, it is advisable to define the term of *regional* development and thoroughly elaborate it in the context and in relation to already known terms, such as *regionalisation* and *regionalism*. Although the terms may seem identical, they cannot be considered synonyms.

It is possible to interpret the terms regionalisation and region by stating that every regionalisation process results in a certain type of region. If all distinctions and similarities among these terms and processes are taken into consideration, it is obvious that they are not immune to globalisation processes that change the world for better or for worse. In accordance with such altered conditions, we can speak of regions that operate more or less successfully on the economic scene.

2.1 Region: Term and meaning

A region as a basic unit of regional development can be viewed from several different aspects. Bjelajac (2011: 45) defines a region as follows: “*The term ‘region’ derives from Latin – regio, regionis which means area, a certain territory with a series of specific features. That territory can be defined by natural but also by economic, physiognomic, planned, modal-functional, analytic, administrative and even social features*”. According to Anić (2004: 1322), a region can be defined as “*a geographical, historical, political or otherwise separated or marked area of one or more countries*.” Rakić (1987: 53) points out: “*A region represents a dynamic physiognomic territorial unit of a qualitative heterogeneous content of natural and cultural systems*.” Therefore, a region indicates a certain area in which different human activities emerge and progress. In a geographical sense, Sulkan Altić (2008: 352) defines it as follows: “*Under the term ‘geographical regions’ we consider a part of a continent of common or similar features*.” Maldini (2014) points out that although the term derives from geographical terminology, certain areas cannot be considered regions only by defining their borders and other geographical features.

The author points out that borders were particularly important in the past because they inhibited or prompted exchange and cooperation with other areas, but in some areas the regions emerged only after people had established stronger connections. The features that differentiate one region from another comprise ethnic affiliation, a different language, culture, religion, political orientation, the level of socio-economic development and a specific social structure.

These features will form important criteria for the assessment of the development level in a certain area and as an assumption about the existence of development predispositions for a certain local and regional area within a national economy. *The Strategy of Regional Development in Croatia by 2020* (further in the text: Strategy) speaks of inability to give a monodimensional definition of the term region. The Strategy deals with the approach to defining a region from different expert points of view in everyday developmental practice. However, cooperation between these expert groups is lacking, which poses problems in the regional development context. One of the recommendations given in the Strategy referring to regions is to include final beneficiaries of public policies (citizens, undertakings, institutions) as regards the complexity of development issues and inability to resolve the issue monodimensionally i.e. from the perspective of a single field of study. In view of defining regions and in accordance with synergy of various professions at national level, Mekanović (2003: 309) states: “*A region is defined as a community that emerges by an agreement between counties*.” By creating regions an attempt is made to efficiently manage the national space and establish cooperation between central authorities and local and regional self-governments, since national economy is diverse and it is very hard to harmonize all its parts i.e. regions of national economy.

Different region types emerge from regionalisation, and Maldini (2014: 140) classifies regions in the following way:

- a) “*according to specific regional features (geographical, cultural, socio-economic, ethnic)*”
- b) “*according to political criteria (by agreement or provisions deriving from political protagonists)*”
- c) “*based on administrative criteria (profiles, population, GDP p/c)*”

The above-mentioned classification has been chosen because it implies all regional features and particularities mentioned in the defining process. Regions are determined according to different criteria and this is the criterion for differentiating them.

2.2 Regionalisation: Term and meaning

Regionalisation is a process of establishing regions initiated at the national level; according to Đulabić (2007: 78), the state aims at dividing the territory into regions and introducing a regional system of management with a higher or lower level of autonomy. Although there are different attitudes of different authors regarding regionalisation, they share certain similarities. Babac and Lauc (1989: 19) define regionalisation as follows: *“Regionalisation may refer to any process by which a regional phenomenon is localized within the overall economic and social development in the past and present.”* Maldini (2014: 140) interprets this process in the following way: *“Regionalisation is the process of establishing regions as administrative and/or political units within a national state as superior entities, which includes decentralisation, i.e. transfer of (part of) powers from national level to subnational (regional) level.”* Long before the Croatian accession to the European Union, Mecanović (2003: 309) pointed out as regards the implementation of regionalisation in the European context, and the existing number of counties: *“There are not more than four or five regions in Croatia that fulfil the criteria of the European Charter of Local Self-Government. Therefore, the regionalisation conditions must be defined.”* It is obvious that the idea of necessity to implement regionalisation has not significantly changed since it was first mentioned, as it can still be seen in the Strategy.

The regionalisation process, as a process of forming regions, can take place either spontaneously or be planned in accordance with the circumstances. It can take place in existing institutions, or for the same purpose, new territorial organisations can be established. Like any other process, it has its advantages and disadvantages. Regionalisation contributes to enhancing specific qualities of a region and to better acceptance of cultural, administrative, geographical and other specific features of the region. In this way, traditional regional values are preserved, the region progresses and it becomes more competitive. At the same time, it facilitates the development of neighbouring regions and the

progress of one region may contribute to the progress of the regions involved in cooperation. There is a possibility to create a stronger balance in the development level of specific regions and to bridge gaps between them. Furthermore, regions are established by regionalisation, and they should connect local with central authorities and give rise to a more effective cooperation.

When it comes to regionalisation types, Klasiček (2008: 140; according to Šimunović, 2007: 69-70) differentiates among political, physiognomic and functional regionalisation. Political regionalisation was established as a means of managing a state territory. Physiognomic regionalisation refers mainly to natural features such as relief and climate, custom and tradition. Functional regionalisation refers to cases when due to inability of an area to carry out a certain type of work it joins another region, or when an area that was an integral part of a region becomes independent. The latter type of regionalisation has become more and more acceptable. Originally, the aim of regionalisation was to promote the developmental balance and equal development in all parts of a country. According to Šimunović (1996: 147) regionalisation emerged in many European countries such as France, Germany, the Netherlands, England, Poland, the USA, the Soviet Union, and in other countries with the changes brought about by the industrial revolution. The aim was to enhance the power of local areas so that they could have greater influence on the state authorities. Additionally, it should lead to removal of concentration of power from particular areas and its even distribution to all local areas. Division of a state area into a number of regional units enables better organisation and management as well as implementation of national development policy. Đulabić (2007: 80) pointed out that the 1990s are frequently marked as a decade of regions because it was the time of sudden strengthening of the regionalisation process when regional levels of government were highlighted.

It means that decentralisation can be carried out successfully through the process of regionalisation so as to facilitate steady development of particular parts of national states. By implementing the principle of subsidiarity⁵, decision making is transferred to regional and local levels, which gain more significance in that way. Such point of view creates synergy with other opinions and scientific sources, especially philosophical ones that support grant-

ing authority to smaller units and not yielding all kinds of business needs and forms to larger units. With respect to the principle of subsidiarity, it is necessary to accept the model of functional regionalisation. As stated in the Strategy, there is no unambiguous recommendation on how to determine the number of regions that would be optimal for developmental planning and managing at the level that is above the level of the counties (NUTS III)⁶ but below the level of statistic regions (NUTS II). According to the Strategy and regarding obvious imbalances in Croatia, the division into five areas has been recommended as an operative proposal (Northern Croatia, Central Croatia, Eastern Croatia – Slavonia and Baranja, Istria, Lika and the Croatian Littoral, Southern Croatia – Dalmatia).

2.3 Regionalism: Term and meaning

“Regionalism is a kind of ideological direction whose underlying idea is to enhance the regional authorities level as a counterbalance to central authority. Regionalism is a process that is always initiated from below (bottom-up) and expresses an effort by which regional units would be entrusted with more control over the whole social, economic, political and other processes in their areas” (Đulabić, 2007: 75). This process primarily emphasizes a political feature and is connected to the term of regional government. It implies the existence of local and regional units below the central authority exercising a high level of autonomy. Thus, regional government manages a great deal of work that is of regional significance. It indicates the presence of decentralisation as regards existing relations within national states. Historically, regionalism in Europe dates back to the Industrial Revolution (18th century) when it aimed at establishing balance with the rest of the world where the process had already taken place. It originally marked the resistance and support to decentralisation of power in order to preserve physical, natural, cultural and historical identity of old French provinces. It strived for larger regional independence from central power. Its historical development is linked to the strengthening of globalisation since it culminated after the World Trade Organisation was established in 1947, which responds to the times of globalisation emerging after World War II. Particularism has been blossoming in the world ever since⁷. The idea has been revived that regional subsystems are important for maintaining the uniform entity, and hence, need to be developed in most European

countries but also in the world, since they show a more rational structure. As Đulabić (2006: 231; according to Dowling, 2003: 3) states: *“Subnational level has become the more important management level in national countries and its influence has been significantly extended in the European context, too.”* As regards the development level, the central parts of national economies located around the capital or other big cities, are the most developed ones. However, distant parts of national states deserve to be included as well; Katunarić (1992: 6; according to Rokkan and Urwin (1983: 141)), among other authors, speaks of their strength. The general idea is that peripheries possess certain independence in relation to the central authority⁸ not only on their cultural and linguistic, but also on economic and political-administrative bases.

In conclusion, it is obvious that regionalisation and regionalism differ. In view of a powerful ideological and political impulse of the term “regionalism” and specific meaning of the term of regionalisation representing a “softer” term for its mostly economic implications, this distinction that the author insists upon, seems to be methodologically extremely important. Lozina (2007: 47; according to Vlajo, 2001: 549) stated that *“regionalisation aims at objective distribution of socio-economic and institutional development whereas regionalism aims at ideology that is based on demands for special rights in various institutions as required by their identity deriving from distinct cultural or ethnic origins.”*

2.4 Regional development: Term, meaning, the case of the Republic of Croatia

After having explained the terms related to regional development, it was easier to present its content and range. The existence of the *Law on Regional Development of the Republic of Croatia* (Official Gazette 147/14, Art. 3, sec. 15)⁹ defining regional development as *“a long-term improvement process of sustainable economic and social development of an area that is realised by recognition, support and management of developmental potential of that area”* speaks for the importance of the topic. According to Bogunović (1998: 74), *“... comprehension of regional development aspect as a set of content and activities in an area observed from the economic point of view, apart from intraregional relations, must be extended by relations, transfer of content and activity to wider areas. In this way interregional relations come inevitably*

into focus of the analysis.” Bogunović (1998: 85) states that “regional development should be understood as a thoughtful process of socio-economic changes demanding permanent analysis, anticipation and direction of development patterns.” Regional development is facilitated by regional policy. The *Law on Regional Development of the Republic of Croatia (Official Gazette No 147/14, Art. 3, Sec. 9)* defines it as an “integral and harmonized set of objectives, priorities, measures and activities that are directed at supporting the long-term economic growth and improvement of the quality of life in accordance with the principles of sustainable development that are directed, in the long run, at diminishing regional differences.”

The aspect of “looking back” as a historical aspect of regional development in the Republic of Croatia according to Čavrak (2003) refers to two subperiods: the first subperiod until 1990 and the subperiod after 1990. The Republic of Croatia moved from one subperiod to another during the period of transition from socialism to market economy. Petrović (2010: 211; according to Monastiriotis and Petrakos 2009: 2-3) states that the first period of regional development lasted a bit shorter i.e. until 1980s and the regional development was under the control of the central state whereas smaller territorial entities had a passive position in which they were mostly not interconnected. It is clear that in this way the potential *spillover* developing effects were lost.

Centralisation in the Republic of Croatia was retained even during the transition period into the market economy. It is usually reflected in a gap of certain indicators, as selected by Čavrak (2003), who points out the existing distinctions according to unemployment, income per capita, presence of various infrastructure components¹⁰ etc. Presumptions of wealth of a country may be expressed in differences provided by various geographical entities, but at the same time, certain disadvantages need to be adjusted through the system of diverse policies. Bogunović (1998: 85) states that we can speak of regional development when “... regional development of Croatia is in focus, emphasizing the specific features of development of its highland areas, islands, its border and war-stricken areas. It is important to create the basic preconditions (infrastructure) to development in these areas that would function as developmental activities in areas with developmental perspective.” There has been an attempt to create a legal background for this purpose. The new *Law on Regional Development in Croatia* (Official Gazette

147/14), which came into force in 2015, determined the ways of providing support for underdeveloped areas from European funds, setting apart Croatian urban areas, the possibility for a group of counties to enter into the development contract, etc. The changes of the old legislation were implemented due to Croatia’s accession to the European Union. Finally, Croatia has attempted to improve the regulations and arrange the field of regional development through legislation, and active implementation of legislation.

It should be emphasized that regional development in the Republic of Croatia cannot follow the example of some other European countries, e.g. Germany, since no regional system has taken hold at the regional level. The counties of the Republic of Croatia are still main territorial units for implementation of regional development policy although, in European terms (by territory and population), they are too small to be the bearers of regional development. Therefore, as previously mentioned, the regional development in the total of five regions is stated in the Strategy.

It is worth noting and at the same time it can also be seen from the given definitions of regional development that regional development relates to the processes and not to current events or actions. Besides, the scope and definition of regional development relate to the activity aspect from which they are defined. In other words, regional development is viewed from the standpoint of social sciences and humanities, economics, geography, history, by representatives of other branches of the academic community or by those involved in practical sciences and business. Regional development is a multidimensional process. It mainly draws on economic development related to local conditions and prerequisites of a particular space. As stated by Marošević (2015: 35; according to Uduporuwa (2007: 22; according to Friedmann, 1970)) regional development is defined as “[...] an event related to economic development. It is related to the location of economic activities as a response to different regional activities. Shifts and changes within a location result in direct consequences affecting income, employment and welfare. Since aerial organisation is the function of activities and interaction, regional development is a simplified expression of this interaction.”

Capello (2016: Introduction) emphasizes the importance of location components and predispositions of growth and speaks of supremacy or suc-

cessfulness of a particular region or location i.e. a city related to the cases of acquiring ownership over production resources in a specific region or locality (city). It can appear as quantitative or qualitative imbalance in geographical resources distribution and economic activities generating various factors of remuneration, various degrees of welfare but also different degrees of control over local development.

Positive changes in regional growth and development¹¹ are commonly reflected in ownership over specific goods and services defined by the location or particular place and they are visible most frequently in defining development components, i.e. subjective and objective components and consequently resulting in welfare as the supreme aim of every development. In case of the Republic of Croatia this would mean that preconditions to development are created by implementation of local predispositions. Denmark and Germany¹², which utilize preconditions of renewable resources as the basis of sustainable development, should present positive models, adapted to the Republic of Croatia in the best possible manner, too. Moreover, there are a number of opportunities for smaller but insufficiently used places and towns in continental Croatia. These prosperous cases should set an example of using the potential and other rich resources in underused local and regional areas of the Republic of Croatia¹³. Moreover, it is possible to put in effort into stronger development of one of the most recent forms of offers in tourism e.g. cyclotourism¹⁴ in the areas where it is still underrepresented. In addition to the shifts that should and can be done in order to use the competitive advantages of a certain region or locality, it is necessary to work on raising the level of utilisation of rich historical and cultural heritage. There are numerous other possibilities within the framework of every single local and regional area that direct and indirect authorities should recognize and offer a potential solution to their own individual local or regional development since they recognize the advantages of the underused potential of the area.

An operative institutional framework should become the focus of attention. Dragičević and Letunić (2008) point out the need to define the institutional framework rather than focus solely on individual efforts, projects and programmes at the local level. Aiming at decreasing regional differences, the authors underline the need for promotion of the bottom-up development. Moreover, due to the or-

ganised institutional infrastructure, it is necessary to enhance the cooperation between private and public sector as well as the coordination at different levels of government, in particular at the regional and local levels of government. The data on the level of successful free economic operation could be read within the context of economic freedoms for 2017 in the Republic of Croatia. According to the Heritage Foundation Report¹⁵ (further in the text: the Report) the index of economic freedoms for denoted period amounts to 59.4, which places the Republic of Croatia within the group of mainly unfree economies. Institutional disadvantages, so the Report, still impede the economic growth. Some authors, e.g. Baletić and Budak (2008) advise considerable caution in the application and interpretation of economic freedoms, pointing out that they are inconvenient as the basis for investment decisions or specific economic policy measures; furthermore, they are not reliable indicators of institutional development or economic efficiency. Nonetheless, they can be used as a useful preliminary framework.

Besides the terms most closely related to regional development and the term regional development itself, it is necessary to determine the basic features of development of local level. The local level impact on higher development levels, as well as adaptation to local conditions along with monitoring events and changes that take place at the overall global scene is called glocalisation.

3. *Glocalisation: Importance and influence*

The functioning of a modern national economy is not isolated from influences of other national economies. A fast transfer of influences is facilitated through globalisation that is deeply rooted in almost every part of the globe, and it is hard to find a geographical area that is not influenced by globalisation. Its influence can be felt in the form of positive and negative aspects and one of the solutions is adaptation to new, modified conditions. The adaption to local circumstances along with tracking the changes at the global scene is integrated in the so-called "glocalisation". In other words, according to the *Cambridge Dictionary*¹⁶, we speak of globalisation adapted to local conditions. As some authors, e.g. Suhaček (2011: 319) state, "*the global and the local represent two sides of the same coin and the nature of contemporary spatial-temporal processes may be better understood by recognizing and analysing socioeconomic aspects of glocalisation*". A num-

ber of authors have dealt with the very process, such as Baumann, 1998; Swyngedouw, 2004; Vizureanu, 2013; Roudometof, 2016.

3.1 The term glocalisation in relation to globalisation

The term glocalisation was coined by merging the words “globalisation” and “localisation”. The term glocalisation was according to Velički (2007: 98) “... introduced by Ronald Robertson, who assumes that globalisation will not lead to world standardisation and monopolisation of cultural products because they need local structures in order to expand. In this sense the term can be considered as an attitude that connects openness to the world with a strong local i.e. regional sense of rootedness.” Glocalisation is important for preservation of cultural specific qualities of particular areas. Although the world has become a global village, local influences and particularities still exist and they find their stronger or weaker expression depending on the specific area. Velički (2007: 98 according to Nelde, 1996) points out: “In this way the individuals are ensured to preserve their identity and specific features. In this sense, so Nelde, (...) the citizen of Vienna will introduce himself to the citizen of Graz as coming from Vienna whereas in the region of Voralberg (in Austria) he would introduce himself as coming from Lower Austria. In Belgium, the same man would introduce himself as

an Austrian whereas in China he would say that he is a European. Naturally, this is not the question of opportunism but it refers more to the sense of rootedness and by this also to the sense of regional identity that is linguistically marked and that can be denoted as multi-identity.”

As a process glocalisation is complex. For instance, Roudometof (2016) emphasises different aspects of glocalisation, weather as a social-scientific research method, for study of the relationship between consumption and culture, in urban studies in the cross- or interdisciplinary area, considering contributions from geography, sociology, urban planning and other related fields etc.

Glocalisation is an adaptation to global changes in the best possible manner. It makes the adaptation easier and ensures that areas keep their particular features while at the same time they implement global influences. Suchaček (2011: 323) states that “the global – local nexus is inherent to the character of spatial processes in general since global processes would not come into existence if there were no localities.” Besides these mentioned, Ejderyan & Backhaus (2007) according to some authors (Robertson, 1992; Swyngedouw, 2004) consider glocalisation as the way that globalisation really operates. The following case studies show how very often the success at the global level is concealed in local preferences and conditions (Figure 1).

Figure 1 Selection of glocalisation examples

- **McDonald’s** – In the United Kingdom, McDonald’s strategy is based on taking into consideration the needs of the local consumers and then adapting to them. The company strives to do this around the world and this refers to McItaly burger in Italy, Maharaja Mac in India, and the McLobster in Canada etc.
- **The Subway chain** does not offer beef in its stores in India.
- **DisneyLand Glocalisation** in Hong Kong is based on less revenue than expected in the course of 2005 for Disneyland visits. Therefore they adapted their meals offer to the local Chinese taste and customs practices and changed the garnishing. In this way, glocalisation was successfully applied to the theme park in Hong Kong.
- **Piaggio’s Scooter Vespa** was adapted for the Indian market and appeared on the market in 2012 to suit the Indian drivers and road conditions.

Source: *Glocalisation Examples – Think Globally and Act Locally*, available at: <http://www.casestudyinc.com/glocalisation-examples-think-globally-and-act-locally>, (Accessed on: March 9, 2017).

These examples show how habits and customs of local and regional population can determine the success or failure of the specific product in a particular market.

Glocalisation may have certain implications and effects on the management of local government as it is for instance investigated by Porto, Porto & Tortarolo (2015) or on the institutional level as it is considered by Ejderyan & Backhaus (2007), when municipalities, regions, etc. want to establish themselves as actors on the global stage (for example, through networking with other local governments). The same author (Ejderyan, Backhaus (2007; according to Cox (1997)) on the other hand, speaks of glocalisation in the field of economics through the following example: when global firms open branches in regions with specific skilled employees that are not so easy to find. Swyngedouw (2004) in the context of a glocalising economy, culture and politics quotes great importance of the changing position of the scale of the state.

So, it should be noted that the role of the state in the glocalisation processes may sometimes be crucial.

3.2 Glocalisation in Croatia

The influence of glocalisation has been noted in the Republic of Croatia mainly through usage of particular, new or modified products. Implementation of specific changes is a process just like adaptation to (new) changes. The fear of adaptation to changes

may be concealed in the potential loss of own cultural elements. In this context Kalapoš (2000: 69) points out: *“In other words, this means that by the production process and popularisation the features are taken from them that are considered to be difficult to adopt for a wider and economically interesting group of consumers on other continents or the features are subsequently added that enable better reception and thereby make the whole process more cost-effective.”* The aim of glocalisation is to prevent the loss of own cultural elements and to improve them by combining them with global influences.

As a small open economy, the Republic of Croatia is exposed to potential danger of losing its national identity, and due to open borders, to potential loss of population. The significant decrease in population caused by changes on the global scene and opening of the market can be prevented if more attention is paid to specific local features and opportunities. The remedy for inner migration of population and single-centre gravitation (Zagreb) could be decentralisation as “an instrument” of keeping the population in all regions of the Republic of Croatia.

The history of economic theory recorded David Ricardo's ideas that can be transposed to both local and regional level in the context of the situation that every country can find a good for production in accordance with the available resources and the need for utilisation of competitive advantages. The same rule may and should be applied to lower levels i.e. regional level (Figure 2).

Figure 2 Selection of glocalisation examples in the Republic of Croatia

- Smart garden faucet that does not freeze in winter. This smart faucet has a thermal self-protection mechanism and is low-temperature resistant.
- Rimac automobiles and Greyp Bikes are producers of top electric vehicles and “smart” bicycles.
- “Croata” ties and the “Museum of Ties” - The “Croata” ties as a movable Croatian and world heritage. The “Museum of Ties” shall contribute to promotion of Croatian cultural identity worldwide by giving the answer to the question on significance of a tie in a cultural context of Western civilisation and the world.
- “Smart” shower that uses solar energy and all parts are attained and assembled in Croatia.
- Steora “smart” bench uses solar energy for USB charging and mobile internet and advertising.

Source: “Smart” faucet¹⁸, available at: <http://www.iwt.hr/o-nama/>, (Accessed on: March 25, 2017); Rimac automobiles¹⁹, available at: <http://www.rimac-automobili.com/en/>, (Accessed on: March 11, 2017); Stenglin, M. (2012), “Glocalisation”: Exploring the Dialectic between the Local and the Global, in Bowcher, W. L., *Multimodal Texts from Around the World: Cultural and Linguistic Insights*, Palgrave Macmillan Publishers, Hampshire, pp. 123-145, available at: https://books.google.hr/books?id=lrE4m9NPmvcC&printsec=frontcover&hl=hr&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false, (Accessed on: March 11, 2017); “Smart” shower²⁰, <http://pitaya-solutions.hr/hr/proizvodi/>, (Accessed on: March 25, 2017); Steora “smart” bench²¹, available at: <http://steora.com/cro.html>, (Accessed on: March 25, 2017).

4. Instead of a conclusion: Policy suggestion

The analysis of definitions of the selected terminology related to regional development shows that the terminology is interrelated and that there are significant differences, too. Several interwoven terms such as regionalism, regionalisation and regional development have been presented from the point of view of different authors and different scientific directions. Regionalisation encompasses the creation process of regions promoted by the state, whereas regionalism is ideologically more oriented towards enhancement of regional level of government. The points of view on the necessity of regionalisation in the Republic of Croatia vary. The supporters of the idea that regionalisation is necessary emphasize the excessive number of local and regional self-governing units and their employees. Moreover, from the point of view of the regions, the attempt of "ideal" division has been made, which is difficult due to a number of different possible criteria of regional, political or administrative nature. In this way, the multiple meaning of the term region is presented. Besides, regions do not necessarily denote the area within the borders of a single state, and can step outside the borders of national spaces. When it comes to the importance of a local area, glocalisation brings the diversity under the global aspect, i.e. it can be defined as *globalisation adapted to local conditions/circumstances*. Different countries and regions, thus, tend to resist or at least moderate globalisation processes in the area by preserving their cultural values and accepting positive influences. It is therefore necessary to adapt to certain changes and accept potential positive influences.

As various indicators of underdevelopment show (e.g. GDP, unemployment rate), there are particular counties in Eastern Croatia²² that lag behind the City of Zagreb and some other counties in Croatia

in their development. According to the most recent available data on competitiveness rank²³ in 2013, it is obvious that as many as three Eastern Croatia counties are among the four counties that rank last.

Interestingly, these counties are quite "distant"²⁴ from the City of Zagreb according to the development criterion, although geographically they are not as distant from the most developed City of Zagreb as some other counties (e.g. Split – Dalmatia County or Dubrovnik – Neretva County) for which very frequently the geographical distance, as one of the obstacles for development, has been emphasized. It can be therefore said that Eastern Croatia counties are significantly more distant than they really are and one of the recommendations is to strive for decentralisation²⁵. One of the particular ways of achieving this is for instance to decentralize the seat of immediate authorities, whereby it would be logical to move the Ministry of Agriculture to one of the cities in Eastern Croatia (e.g. Vukovar) and to move the seat of some other Ministry to underdeveloped towns in Slavonian or Dalmatian midland regions. This way of decentralisation would significantly contribute to the development of particular areas.

Moreover, it is necessary to use the existing potential of Eastern Croatia by formation and organisation of new industries or by organising reindustrialisation²⁶. According to the *Strategy*, the vision for the Republic of Croatia has its stronghold in regions as the foundation of development: "*The land of prosperous regions and happy people.*"

Further regional development should be motivated in the direction of local development enhancement as well as favouring functional regionalisation. Further research and guidelines should comprise details of potential innovations and comparative advantages of local self-government as foci of future development.

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to this principle (formulated in the encyclical *Quadragesimo anno* as an important principle of social philosophy): “As it is not allowed to take from an individual what they can perform with their own motivation and means in order to confer it on the society, it is against justice to leave to the bigger society what smaller groups can perform by their own means and powers. The society must help smaller groups and the individual without exchanging them for another, let alone absorbing them.”].

- 6 NUTS (French: Nomenclature des unités territoriales statistiques – Croatian: Klasifikacija prostornih jedinica za statistiku, English: Nomenclature of Territorial Units for Statistics): there are three levels of territorial classification, NUTS I, NUTS II, and NUTS III.
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- 16 Cambridge Dictionary, accessible at: <http://dictionary.cambridge.org/dictionary/english/glocalization#translations>, (Accessed on: March 5, 2017). Glocalisation means “*the idea that in globalisation local conditions must be considered: Our policy of glocalisation means that our products are always adapted to specific markets.*” **the idea that in globalization local conditions must be considered:** Our policy of glocalization means that our products are always adapted to specific markets. **the idea that in globalization local conditions must be considered:** Our policy of glocalization means that our products are always adapted to specific markets.
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*Katarina Marošević
Dijana Bošnjak*

REGIONALNI RAZVOJ I GLOKALIZACIJA: TEORIJSKI OKVIR

SAŽETAK

Važnost regija i regionalnog razvoja u suvremenim gospodarstvima neupitna je. Stoga je cilj rada s različitih gledišta pojasniti pojam regionalnoga razvoja i učestalo korištene pojmove vezane uz regionalni razvoj. Priказuje se nužnost dodjeljivanja ovlasti manjim jedinicama, a uz poštivanje načela supsidijarnosti, potrebno je prihvatiti i model funkcionalne regionalizacije. Poštivanjem načela supsidijarnosti, jedinicama lokalne i regionalne samouprave ostavlja se prostor za pokretanje regionalnog razvoja te se govori o globalizaciji prilagođenoj lokalnim uvjetima.

Osim navedenog, u radu se daje i nekoliko pozitivnih inovacijskih primjera o pokretanju razvoja, kao i nekoliko sugestija vezanih uz slabije razvijene dijelove tj. regije Republike Hrvatske. Primjerice, geografska udaljenost županija istočne Hrvatske znatno je manja u odnosu na geografsku udaljenost nekih drugih županija (npr. Dubrovačko-neretvanska) u odnosu na grad Zagreb, ali stupnjem ekonomskog razvoja znatno „udaljenija“, što upućuje na nužnost provedbe decentralizacije te korištenja potencijala županija istočne Hrvatske pokretanjem novih industrija ili reindustrijalizacijom.

Ključne riječi: regionalni razvoj, glokalizacija, regionalizacija, regionalizam, decentralizacija

BOOK REVIEW

PRIKAZ KNJIGE

Katija Vojvodić:

Book review "Trade Perspectives in the Context of Safety, Security, Privacy and Loyalty"



Katija Vojvodić

University of Dubrovnik

Department of Economics and Business Economics

Lapadska obala 7,

20000 Dubrovnik, Croatia

katija.vojvodic@unidu.hr

Phone: +38520445902

BOOK REVIEW

“TRADE PERSPECTIVES IN THE CONTEXT OF SAFETY, SECURITY, PRIVACY AND LOYALTY”

**TITLE: Trade Perspectives in the Context of
Safety, Security, Privacy and Loyalty**

**AUTHORS: Sanda Renko and Blaženka
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The existing literature on distributive and international trade has been recently enriched by the publication entitled *Trade Perspectives in the Context of Safety, Security, Privacy and Loyalty* edited by Prof. Sanda Renko and Prof. Blaženka Knežević of the University of Zagreb, Faculty of Economics and Business. As outlined in the preface, the book is the outcome of the scientific conference Trade Perspectives 2016 held at the Faculty of Economics and Business at the University of Zagreb. The Trade Perspective conferences have taken place since 2010 and the event has enjoyed increasing success with both academics and practitioners. Year after year, the conference brings various challenging topics in the field of distributive trade into focus. The chapters in this book consist of selected and updated pa-

pers presented at the conference. The contributors are both academics and professionals from several Central and Eastern European countries specialized in the diverse topics addressed in the book.

The book covers a variety of topics ranging from terrorism and piracy, theft and counterfeiting, consumer loyalty, to the issues of privacy and security in electronic and mobile commerce. In other words, it strongly reflects the reality of today's world and emphasizes ongoing events and recent developments occurring around us and influencing both business and social settings. The book is organized into eleven chapters: 1 Supply Chain Resilience and International Terrorism; 2 Does Terrorism Affect Trade and Tourism?; 3 The Elements for Assessing Shrinkage in Retail Trade in Croatia; 4 How Secure are International Trade Supply Chains: The Threat of Modern Maritime Piracy; 5 The Effects of Product Counterfeiting; 6 Security, Legal Protection for Consumers and Ethical Problems in International Trade; 7 A Trade Facilitation Agreement Tool to Facilitate and Secure Trade; 8 The Risks Associated with the Efforts in the Creation of Loyal Customers; 9 Mobile Commerce in Croatia and Serbia: A Security and Privacy Perspective; 10 Safety Issues of Low Energy Micro-Location Technology in Retailing, and 11 Safety and Loyalty in Footwear Retail.

Chapter 1 opens with the implications of terrorism on global supply chains through the concept of supply chain resilience. It is emphasized that sup-

ply chains are targeted by terrorist organizations at least once every seven days, whilst there are more than thirty countries in the world in which terrorism-motivated attacks on the supply chain happen on a regular basis. Furthermore, the chapter focuses on risks causing potential disruptions in supply chains, the concept of supply chain risk management, and supply chain resilience as a key attribute in dealing with the threats of terrorism.

In the light of recent events in France and Egypt, Chapter 2 places the emphasis on the influence of terrorism on trade and tourism. Based on the correlation between the number of terrorist incidents and the number of tourist arrivals, the impact of terrorism on tourism and the economy of France and Egypt is assessed. Following this, the influence of terrorism on trade in France is evaluated taking into account the correlation between the number of terrorist attacks and the trade indicators in France.

Next, Chapter 3 shifts focus to examine the phenomenon of shrinkage in retail trade. As far as Croatian retail trade is concerned, this issue has been rather neglected. Consequently, the authors attempt to make a value assessment of this phenomenon in retail trade in the Republic of Croatia. Based on five variations of the average rate of shrinkage, the possible range of total shrinkage, shrinkage value per household and shrinkage value per inhabitant are determined.

In Chapter 4, international supply chains in the context of modern maritime piracy are addressed. Contemporary maritime piracy is argued to have a limited impact on the operations of international supply chains. This is evidenced by the fact that the size of such an activity and its direct economic costs, in comparison with the size of the global trade carried along sea routes, seems to be insignificant. Despite these arguments, it is stressed that the issue of maritime piracy should not be underestimated.

Globally, the trade in counterfeit products is one of the fastest growing industries. The intriguing issue of counterfeiting, often referred to as the “crime of the 21st century”, is discussed in Chapter 5. The extent of the economic impact of trade in counterfeit goods on three product categories on the Croatian market are examined. The analysis highlights that revenue losses in these categories reached almost 10% consequently reducing job creation, tax revenues and consumer spending.

In addition to counterfeiting, a number of legal and ethical issues appear in the field of global trade and international business relations. As a result, Chapter 6 seeks to address some of the most important issues of security, legal protection and ethical issues in international trade. In particular, it emphasizes dumping, sanctions, fair trade and the procurement and sale in the global market, with special reference to the legal protection of consumers and the legislative regulation of these areas.

Further, trade facilitation is recognized as a factor that improves the global competitiveness of the subjects involved in international trade by creating a more reliable trading environment. In that sense, Chapter 7 deals with the Trade Facilitation Agreement, World Customs Organization Time Release Study and OECD Trade Facilitation Indicators. By comparing the methodology used by the WCO and the measures used by OECD, additional trade facilitation measures based on customs modernization and electronic customs operations are proposed.

Nowadays, retailers operate in the fast-changing competitive environment. In addition, they play a major role in creating pathways to lasting customer relationships and customer loyalty. Chapter 8 examines the factors affecting the satisfaction and loyalty of consumers in the Croatian retail market. The importance of customer loyalty is stressed, particularly in the context of growth and business performance of companies engaging in retail activities.

In the retail environment, consumers’ needs are ever changing and new non-store retailing methods are introduced, such as mobile commerce. The mobile revolution in a consumer society is another intriguing area of research, especially in terms of privacy and security risks. In that context, Chapter 9 provides new insights into mobile commerce in the Western Balkans, i.e., Croatia and Serbia. Particular focus is given to security, safety and privacy issues associated with mobile shopping.

Recently, micro-location based technology has been receiving a lot of attention and is one of the most interesting technical developments in the customer experience innovation space. Chapter 10 concentrates on micro-location low energy technology in the retail industry and provides empirical evidence supporting positive and negative attitudes towards the adoption of this technology on the Croatian market. Finally, the remaining chapter focuses on the issues of safety and loyalty by exploring custom-

er behaviour characteristics and the factors affecting customer loyalty in the footwear market.

By providing a comprehensive overview of the major contemporary issues in international and domestic trade, *Trade Perspectives in the Context of Safety, Security, Privacy and Loyalty* is a valuable resource and an important addition to the bookshelf of researchers, practitioners, educators and students who strive to deepen their understanding of the field. All of them will find this book helpful for a number of reasons. By offering theoretical background and empirical evidence, this book enables both researchers and practitioners to stay up-to-date on recent developments and current issues that intrigue them. Throughout the book, a variety of useful information, alternative approaches, suggestions and recommendations are offered. In addition, the authors identify different areas in which further research should be undertaken and raise many questions in need of further investigation.

An important contribution of this book is a multi-disciplinary framework for analysing contemporary security and safety issues, as well as recent trends in technology development and consumer behaviour. Educators will also find the book useful in creating and developing their course syllabi, as well as updating learning resources and course content. In that context, recommendations for future research at the end of chapters may also serve as ideas for new student projects or various assignments. Likewise,

the book allows students to update and extend their knowledge of this field and helps them prepare for their essays, theses and projects.

Overall, the book is complete and well written, in clear and understandable language with plenty of tables and figures accompanying the text. References at the end of each chapter cover a range of relevant and up-to-date resources for additional information. Furthermore, the index at the end of the book facilitates navigation through the texts. Despite being comprehensive, informative and factual, the book remains easy to read and understand. As such, it should be of interest to a wide range of readers enthusiastic about these challenging topics.

One of the major strengths of the book lies in the fact that it will encourage other researchers to extend their knowledge of recent advances and developments in the field, such as micro-location technology in retailing or other emerging issues mentioned throughout the book. With the wealth of information contained in this book, both researchers and practitioners will be well equipped to anticipate changes and stay competitive in a rapidly changing global environment. Finally, the book not only highlights new concerns and raises awareness of problems regarding security, privacy and ethical issues, but it also offers answers to challenges concerning the possible ways of dealing with them.

UPUTE AUTORIMA

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