

NAMERA PONAŠANJA PREMA USLUGAMA ZELENOG BANKARSTVA: MODERIRAJUĆI EFEKTI EKOLOŠKE SVESTI

Nenad Đokić¹, Vera Mirović², Nikola Milićević³, Branimir Kalaš⁴, Ines
Đokić⁵

doi: 10.59864/Oditor12502ND

Originalan naučni rad

UDK: 336.71:174

005.591.6:338.467

Apstrakt

Da bi se smanjili negativni uticaji na životnu sredinu, koji se manifestuju kroz probleme poput globalnog zagrevanja, krčenja šuma i zagađenja vazduha, različiti poslovni i društveni entiteti treba da donesu važne odluke i sprovedu određene promene u svojim aktivnostima. Među njima, značajan doprinos realizaciji pomenutog zadatka može se očekivati od banaka. Zelene bankarske usluge su samo jedno od rešenja koja mogu smanjiti ekološki rizik i pružiti određene beneficije korisnicima. Stoga, u ovom radu, pažnja je posvećena tim uslugama, odnosno analizi ponašanja prema njima. Model zasnovan na teoriji planiranog ponašanja (TPB) primenjen je, pri čemu je, pored tri glavna prediktora, ekološka svest dodata kao moderator. Za analizu moderirajućih efekata korišćeno je modelovanje strukturalnih jednačina. Nakon predstavljanja istraživačkih rezultata, date su određene implikacije.

Ključne reči: zeleno bankarstvo, namera ponašanja, teorija planiranog ponašanja, stav, ekološka svest, moderacija

JEL: M31, G21

¹ Vanredni profesor, Nenad Đokić, Univerzitet u Novom Sadu, Ekonomski fakultet u Subotici, Segedinski put 9-11, Subotica, Republic of Serbia, Tel: +381 24 628 217, E-mail: nenad.djokic@ef.uns.ac.rs

² Vanredni profesor Vera Mirovic, Univerzitet u Novom Sadu, Ekonomski fakultet u Subotici, Segedinski put 9-11, Subotica, Republic of Serbia Tel: +381 24 628 163, E-mail: vera.mirovic@ef.uns.ac.rs

³ Vanredni profesor, Nikola Milicevic, Univerzitet u Novom Sadu, Ekonomski fakultet u Subotici, Segedinski put 9-11, Subotica, Republic of Serbia, Tel: +381 24 628 035, E-mail: nikola.milicevic@ef.uns.ac.rs

⁴ Docent, Branimir Kalaš, Univerzitet u Novom Sadu, Ekonomski fakultet u Subotici, Segedinski put 9-11, Subotica, Republic of Serbia, Tel: +381 24 628 163, E-mail: branimir.kalas@ef.uns.ac.rs

⁵ Vanredni profesor, Ines Đokić, Univerzitet u Novom Sadu, Ekonomski fakultet u Subotici, Segedinski put 9-11, Subotica, Republic of Serbia, Tel: +381 24 628 133, E-mail: ines.djokic@ef.uns.ac.rs

Uvod

Procesi industrijalizacije i globalizacije doneli su mnoge koristi dodajući "mnogo udobnosti i luksuza ljudskom životu"; međutim, takođe su doveli do upozoravajuće situacije u vezi sa degradacijom životne sredine (Tara et al., 2015, str. 1029). Izveštaj Međuvladinog panela o klimatskim promenama (IPCC) ne samo da je potvrdio da ljudske aktivnosti utiču na globalno zagrevanje, već je ukazao i na njegovo dalje ubrzanje, pri čemu bi između 2030. i 2052. moglo dostići nivo od 1,5 °C više nego u preindustrijskom periodu (Park, Kim, 2020). Problem globalnog zagrevanja utiče na promene klime, a time i na druge aspekte ljudskog društva, uključujući zdravlje, proizvodnju hrane, dostupnost vode, upotrebljivost zemljišta, itd. (Shafique, Khan, 2020).

Da bi se ublažili negativni efekti globalnog zagrevanja, potrebne su značajne promene koje treba da primene različiti društveni i poslovni entiteti. Među njima, posebno mesto pripada bankama, koje pored finansijskog razvoja mogu imati proaktivnu ulogu i u očuvanju ekologije (Bouteraa et al., 2020). Pored mobilizacije finansijskih resursa (Aracil et al., 2021), bankarski sektor ima važnu funkciju u pružanju podrške zemlji u prilagođavanju klimatskim promenama i poboljšanju otpornosti na klimatske rizike (Park i Kim, 2020). Stoga, kako su pomenuli Bukhari et al. (2022, str. 287), "digitalizacija i ozelenjavanje ekonomskog sistema zemlje u velikoj meri zavise od ozelenjavanja bankarske industrije". Zelena bankarstvo može značajno pomoći u rešavanju brojnih ekoloških problema, koji se odnose na gubitak biodiverziteta, krčenje šuma, klimatske promene i probleme sa kvalitetom vazduha; istovremeno, uključeno je i u obezbeđivanje korisnih prilika za korisnike usluga (Chew et al, 2016).

Što se tiče zaštite životne sredine, važnu ulogu imaju kupci. U poslednjih nekoliko decenija, došlo je do određenih promena u njihovoj svesti i potrošnji zelenih proizvoda i usluga; porast ekološke svesti, između ostalog, dogodio se kao rezultat veće medijske pažnje i povećane svesti o ekološkim štetama (Ansu-Mensah, 2021). Upoznavanjem sa negativnim posledicama svojih kupovnih navika i odluka, kupci su počeli da menjaju svoje stavove o ekološkim pitanjima (Costa et al, 2021). Preferiranje zelenih proizvoda i usluga može se videti kao efikasan način zaštite prirode, pri čemu se ovaj trend pretvara u subkulturu (Ahmad, Zhang, 2020).

Imajući sve prethodno navedeno u vidu, u ovom radu akcenat je na nameri kupaca prema zelenim bankarskim uslugama u Autonomnoj Pokrajini Vojvodini, Republici Srbiji. Stoga su prezentovana objašnjenja i karakteristike zelenog bankarstva, kao i istraživanja sa sličnom temom. Nakon pregleda studija, postavljen je model zasnovan na teoriji planiranog ponašanja (TPB). Pri tome, pored stavova, percipirane kontrole ponašanja i subjektivnih normi, model je uključivao ekološku svest kao moderator. Nakon predstavljanja dobijenih rezultata, sledi diskusija i zaključak.

Koncept zelenog bankarstva

Iako se sama ideja pojavila 1968. godine, koren današnjeg koncepta zelenog bankarstva leži u osnivanju Triodos banke 1980. godine; ime ove banke potiče iz grčkog "tri hodos", što znači "trostruki pristup" (planeta, ljudi i profit) (Apostoaie et al, 2019).

Zeleno bankarstvo (ZB) povezano je sa drugim terminima, poput etičkog bankarstva, ekološki prihvatljivog bankarstva i održivog bankarstva (Bouteraa et al., 2020). U skladu sa Rajan (2020), ono korelira sa terminom Korporativne društvene odgovornosti (CSR), pri čemu je fokus na zaštiti životne sredine i smanjenju emisije ugljenika pri pružanju bankarskih usluga. Međutim, iako se ovi termini mogu koristiti kao sinonimi, zeleno bankarstvo, kao i društveno bankarstvo, etičko bankarstvo i CSR mogu se posmatrati u kontekstu održivog bankarstva, koje obuhvata sva tri aspekta: ekološki, etički i društveni (Kumar, Prakash, 2019). To implicira da banke treba da kreiraju adekvatan poslovni model zasnovan na komponentama poput profita, ljudi, kao i planete.

Što se tiče koncepta ZB, postoji mnogo objašnjenja koja se odnose na ovaj termin. Prema Izveštaju o zelenom bankarstvu, "ZB se odnosi na implementaciju, podršku i promociju ekološki prihvatljivih praksi i smanjenje ugljeničnog otiska u internim i eksternim operacijama banaka" (Apostoaie et al., 2019, str. 3). Park, Kim (2020, str. 4) definisali su zeleno bankarstvo "kao finansijske aktivnosti bankarskih i nebankarskih finansijskih institucija sa ciljem smanjenja emisija gasova sa efektom staklene bašte i povećanja otpornosti društva na negativne uticaje klimatskih promena uzimajući u obzir i druge ciljeve održivog razvoja kao što su ekonomski rast, stvaranje radnih mesta i rodna ravnopravnost". Bhardwaja, Malhotra (2013, str. 181) definišu ZB kao "bankarski posao koji se obavlja na takvim područjima i na takav način da pomaže ukupno smanjenje spoljnih emisija ugljenika i unutrašnjeg ugljeničnog otiska". Prema Bukhari et al. (2022), zeleno bankarstvo može se smatrati bankarskom ideologijom čije usvajanje treba da dovede do uključivanja vrednosti ekološke etike u svakodnevne bankarske aktivnosti i finansijski portfolio. Kako je pomenuto u istraživanju Ibe-enwoa et al. (2019), zelena banka se odnosi na bankarski sistem vođen vrednostima koji zadovoljava želje klijenata pružajući sigurnost njihovih investicija, depozita i životne sredine.

Kada je reč o proizvodima i uslugama zelenog bankarstva, Park i Kim (2020) su razlikovali šest glavnih kategorija: zajmovi, osiguranje, sekjuritizacija, investicije u kapital, brokerske usluge i stvaranja tržišta, kao i tehnička pomoć. Što se tiče individualnih klijenata, osim finansiranja zelenih startapova i projekata, posebna pažnja treba da bude posvećena ličnim zajmovima za kupovinu energetski efikasnih i ekološki prihvatljivih proizvoda i vozila.

Konceptualni model i hipoteze

Prilikom analize zelenih bankarskih usluga, posebna pažnja treba da bude posvećena tražnji. Stoga, postoji niz istraživanja u kojima je naglasak na klijentima, odnosno na njihovim namerama da koriste ovu vrstu usluga. Predmeti tih istraživanja bili su svest klijenata o konceptu zelenog bankarstva (Pariag-Maraye et al., 2017), percepcija klijenata o praksama zelenog bankarstva (Rai et al., 2019), zadovoljstvo klijenata (Bihade, Karande, 2020; Herath i Herath, 2019; Solekah, 2019; Sultana et al., 2021), i lojalnost (Ibe-enwo et al., 2019; Solekah, 2019; Sun et al., 2020).

Takođe, u određenim studijama, naglasak je bio na nameri kupaca prema zelenim bankarskim uslugama. Neki od njih su se bazirali na primeni ujedinjene teorije prihvatanja i korišćenja tehnologije (UTAUT). Bouteraa et al. (2020) predložili su model koji, pored namera kupaca, uključuje četiri UTAUT faktora (očekivanje performansi, očekivanje napora, društveni uticaj i olakšavajući uslovi) i religioznost. Postoji i predlog prema kojem namera kupca da usvoji zeleno bankarstvo može biti određena UTAUT faktorima i osam dodatnih varijabli, koje su kategorizovane u četiri glavne grupe: individualne dimenzije (lična inovativnost, svest i percipirana korist), dimenzije organizacije (kvalitet sistema i podrška vrhovnog menadžmenta), tehnologija (sigurnost i privatnost) i okruženje (podrška vlade i podrška dobavljača) (Bouteraa et al., 2021).

Pored UTAUT-a, primenjivana je i teorija planiranog ponašanja (TPB). Osim namere i ponašanja, ova teorija uključuje još tri varijable: stav prema ponašanju, subjektivne norme (percepcija društvenog pritiska o izvršavanju ili neizvršavanju ponašanja) i percipirana kontrola ponašanja (Ajzen, 1991). Pristup TPB već je korišćen u nekoliko studija za analizu namere kupovine i/ili ponašanja u vezi sa zelenim proizvodima i uslugama (Kamalanon et al., 2022; Liobikienė et al., 2016; Nimri et al., 2020; Ting et al., 2019; Vu et al., 2022; Wang, Wong, 2021; Yadav, Pathak, 2017). Na osnovu toga, Taneja i Ali (2021) istraživali su nameru kupaca prema ekološki održivim bankarskim uslugama. Pored stava, percipirane kontrole ponašanja i subjektivnih normi (kao glavnih determinanti namere ponašanja prema TPB), njihov model uključivao je još tri varijable (poverenje, percepcija ekoloških ishoda i ekološka svest).

Milicević i sar. (2023) takođe su se oslonili na primenu TPB pristupa kako bi ispitali nameru korišćenja zelenih bankarskih usluga. Predmet analize bili su uticaji četiri prediktora - tri determinante TPB-a i ekološka svest, sa polom kao moderatorom.

U studijama koje se odnose na zelene proizvode ili usluge, ekološka svest, tj. "stepen do kojeg je osoba orijentisana ka brizi za životnu sredinu" (Lin, Chang, 2012, str. 127), nije korišćena samo kao prediktor, već i kao moderator. Lin, Chang (2012), između ostalog, analizirali su njegovu moderirajuću ulogu u

korišćenju redovnih vs. zelenih proizvoda. Garvey, Bolton (2017) su pokazali da je ekološka svest moderirala uticaj izbora eko-proizvoda na odgovorno ponašanje prema životnoj sredini. Moderirajuća uloga ekološke svesti ispitana je u kontekstu bihevioralnih namera prema hotelskim objektima sa ekološkim sertifikatom (de Leaniz et al., 2018). Kautishet al. (2019) su istraživali moderirajuće efekte ekološke svesti i namera recikliranja na ponašanje u kupovini zelenih proizvoda u svetlu TPB teorije, pri čemu su značajni moderacijski efekti ekološke svesti uočeni u odnosu između percepcije efikasnosti potrošača i kupovine zelenih proizvoda, kao i između spremnosti da se bude ekološki prijateljski raspoložen i kupovine zelenih proizvoda.

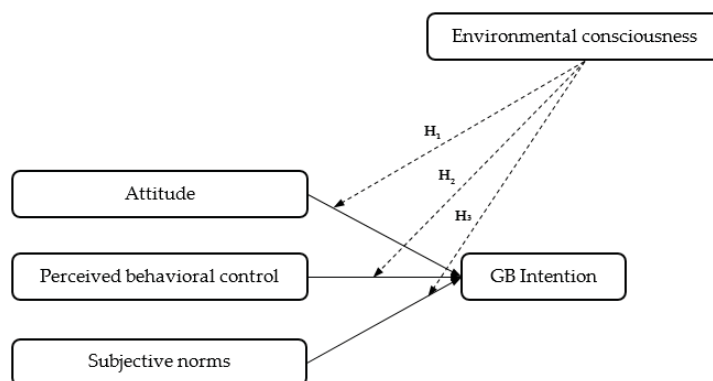
Oslanjajući se na istraživanje Milicevica et al. (2023), postavili smo model prikazan na slici 1. Imajući u vidu da su odnosi između prediktora TPB-a i nameravanog ponašanja već ispitani u pomenutom istraživanju, fokus ovog rada bio je na moderirajućim efektima. Stoga smo testirali sledeće hipoteze:

H₁. Ekološka svest moderira uticaj stava na nameru korisnika prema uslugama zelenog bankarstva.

H₂. Ekološka svest moderira uticaj percipirane kontrole ponašanja na nameru korisnika prema uslugama zelenog bankarstva.

H₃. Ekološka svest moderira uticaj subjektivnih normi na nameru korisnika prema uslugama zelenog bankarstva.

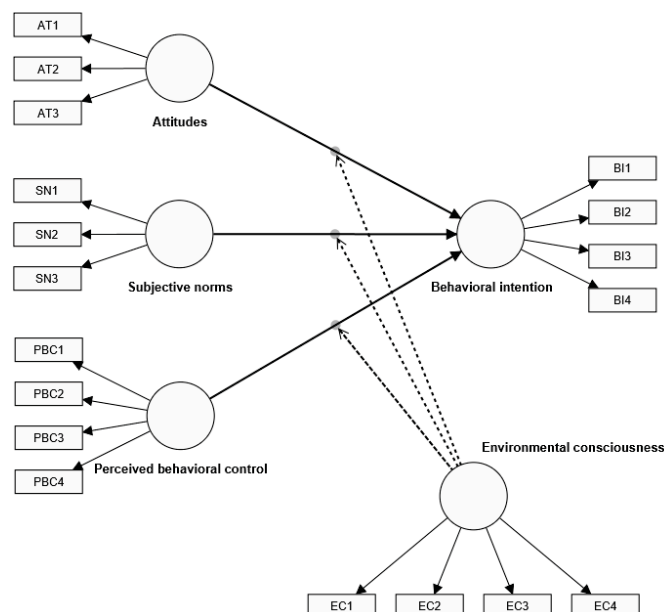
Slika 1. Konceptualni model



Materijali i metode

U istraživanju smo koristili prigodan uzorak koji je obuhvatio 733 ispitanika iz Autonomne Pokrajine Vojvodine (Republika Srbija). Prosečna starost ispitanika bila je preko 34 godine, pri čemu je većina njih (oko 65%) bila ženskog pola. Podaci su obrađeni u Softveru SmartPLS 4 2024. godine.

Slika 2. Statistički model



Naš statistički model (prikazan na slici 2) uključivao je nameru ponašanja (BI) kao nezavisni konstrukt; stav (AT), percipiranu kontrolu ponašanja (PBC) i subjektivne norme (SN) kao njegove glavne prediktore; i ekološku svest (EC) kao moderator.

Stavke korišćene u istraživanju ocenjene su na petostepenoj Likertovoj skali (od "potpuno se ne slažem" do "potpuno se slažem"). Četiri od pet konstrukata (percipirana kontrola ponašanja (PBC1 - PBC4), subjektivne norme (SN1 - SN3), stav (AT1 - AT3) i namera ponašanja (BI1 - BI4)) merene su u skladu sa Taneja and Ali (2021), dok smo se za merenje ekološke svesti (EC1 - EC4) koristili studiju Costa et al. (2021).

Pomenuti konstrukti tretirani su kao reflektivni, zbog čega su predmet analize bili pojedinačna pouzdanost indikatora (ocenjena spoljašnjim opterećenjima), unutrašnja konzistentnost pouzdanosti (ocenjena kompozitnom pouzdanošću (CR)), konvergentna validnost (ocenjena prosečnom ekstrahovanom varijansom (AVE)) i diskriminantna validnost (ocenjena korišćenjem HTMT pristupa) (Hair et al., 2017).

Na nivou strukturnog modela, proverili smo potencijalne probleme multikolinearnosti analizirajući unutrašnje VIF vrednosti prediktorskih konstrukata. Za testiranje hipoteza, uzeli smo u obzir značajnost koeficijenata putanje u vezi sa tri interakcije (AT*EC, PBC*EC, and SN*EC), kao i njihovu suštinsku važnost analizirajući efekte veličine f^2 (Becker et al., 2023).

Rezultati i diskusija

Svi reflektivni konstrukti (namera ponašanja, stav, subjektivne norme, percipirana kontrola ponašanja i ekološka svest) su testirani u pogledu pouzdanosti i validnosti. Ovi rezultati su prikazani u Tabeli 1.

Tabela 1. Reflektivni konstrukti – kriterijumi kvaliteta

Konstrukti i stavke	Opterećenja	AVE	CR
Percipirana kontrola ponašanja		0.737	0.918
PBC1	0.805		
PBC2	0.905		
PBC3	0.897		
PBC4	0.822		
Subjektivne norme		0.655	0.850
SN1	0.887		
SN2	0.803		
SN3	0.731		
Stav		0.675	0.862
AT1	0.798		
AT2	0.786		
AT3	0.879		
Namera ponašanja		0.759	0.926
BI1	0.846		
BI2	0.889		
BI3	0.900		
BI4	0.849		
Ekološka svest		0.726	0.914
EC1	0.820		
EC2	0.856		
EC3	0.864		
EC4	0.867		

Izvor: Autori

Spoljašnja opterećenja za sve indikatore bila su veća od 0.7, potvrđujući pouzdanost pojedinačnih indikatora. Pored toga, vrednosti AVE i CR su takođe bile zadovoljavajuće, odnosno veće od 0.5 i 0.7, redom.

Rezultati testiranja diskriminantne validnosti prikazani su u Tabeli 2.

Tabela 2. Diskriminantna validnost - HTMT pristup

	HTMT
Namera ponašanja -> Stav	0.712
Ekološka svest -> Stav	0.307
Ekološka svest -> Namera ponašanja	0.281
Percipirana kontrola ponašanja -> Stav	0.314
Percipirana kontrola ponašanja -> Namera ponašanja	0.377
Percipirana kontrola ponašanja -> Ekološka svest	0.108
Subjektivne norme -> Stav	0.560

Subjektivne norme -> Namera ponašanja	0.342
Subjektivne norme -> Ekološka svest	0.055
Subjektivne norme -> Percipirana kontrola ponašanja	0.577

Izvor: Autori

Kako su vrednosti HTMT za sve parove bile ispod praga od 0.85, može se zaključiti da je uspostavljena diskriminantna validnost.

Vrednost R^2 iznosila je 0,415. Što se tiče multikolinearnosti, nije bilo problema imajući u vidu da su sve unutrašnje VIF vrednosti bile manje od 5. Koeficijenti za svaki odnos, praćeni njihovim p-vrednostima, prikazani su u Tabeli 3.

Tabela 3. Path koeficijenti – testiranje hipoteza

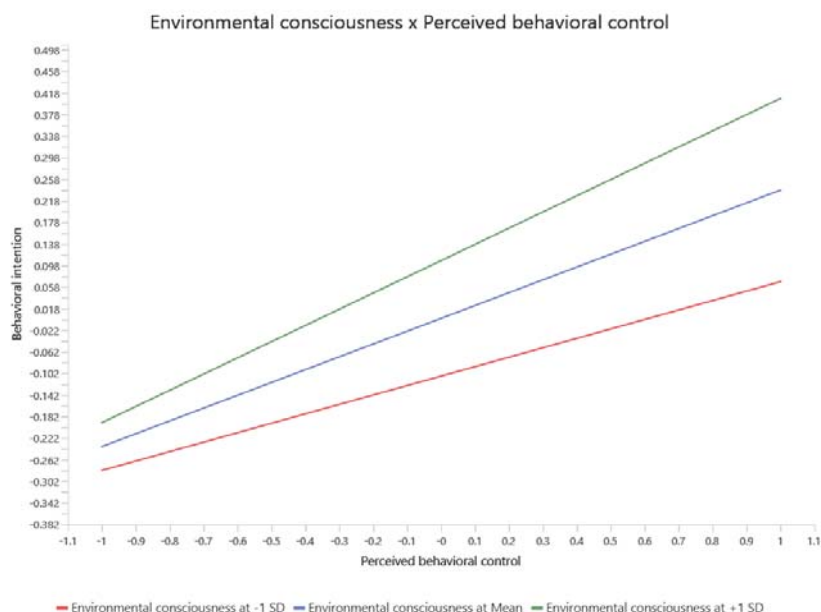
Path koeficijenti	Direktni efekti	p-value
Stav → Namera ponašanja	0.522	0.000
Percipirana kontrola ponašanja → Namera ponašanja	0.238	0.000
Subjektivne norme → Namera ponašanja	-0.050	0.167
AT*EC → Namera ponašanja	-0.045	0.091
PBC*EC → Namera ponašanja	0.063	0.071
SN*EC → Namera ponašanja	-0.045	0.219

Izvor: Autori

U slučaju glavnih prediktora TPB-a, zabeleženi su pozitivni efekti na nameru ponašanja za stav i percipiranu kontrolu ponašanja. Ovi efekti takođe su bili značajni sa p vrednošću manjom od 0,05. S druge strane, subjektivne norme su imale negativan uticaj na nameru ponašanja sa p-vrednošću većom od 0,05. Imajući u vidu da su sva tri koeficijenta dobijena u modelu koji uključuje moderatora, oni predstavljaju "proste efekte" i mogu se koristiti za tumačenje rezultata analize modulacije (Hair et al., 2017).

Što se tiče interakcija, dva od njih (AT*EC and SN*EC) negativno su uticala na nameru ponašanja, dok je efekat PBC*EC bio pozitivan. Međutim, njihove p-vrednosti bile su veće od 0,05, dok su za AT*EC i PBC*EC bile ispod 0,1. Dodatno, proverili smo da li su ova dva efekta suštinska, analizirajući njihove efekte veličine f^2 . Vrednost f^2 premašila je donju granicu od 0,005 samo u slučaju interakcije PBC*EC. Budući da je iznosila 0,006, ovaj efekat je smatran slabim (Becker et al., 2023). Time, uz određeni stepen opreza, samo hipoteza H_2 mogla bi biti potvrđena. Stoga, sledeći Hair et al. (2017), ako se prosečna vrednost svesti o životnoj sredini poveća za jedno standardno odstupanje (SD), odnos između PBC i namere ponašanja povećao bi se na vrednost od 0,301 (0,238 + 0,063). Ovo se takođe može videti na Slici 3, gde je zelena linija (ekološka svest na + 1 SD) strmija od plave linije (ekološka svest na srednjoj vrednosti).

Slika 3. Analiza jednostavnog nagiba



Kada su u pitanju slična istraživanja, prilikom ispitivanja moderirajućih efekata svesti o životnoj sredini, Kautish et al. (2019), između ostalih, su ustanovili pozitivan i značajan uticaj PBC na ponašanje zelene kupovine kod grupe potrošača sa visokom svesti o životnoj sredini, dok u slučaju grupe sa niskom svesti o životnoj sredini nije bio značajan.

Zaključak

Da bi zaštitili životnu sredinu, kako kupci, tako i različite organizacije, treba da promene svoje aktivnosti - da postanu zelenije. Među njima, posebno mesto pripada bankama, koje mogu doprineti ostvarivanju ciljeva održivog razvoja kako direktno, tako i indirektno. Kroz pružanje zelenih usluga, banke mogu doneti mnoge koristi, ne samo u vezi sa životnom sredinom, već i one koje su povezane sa korisnicima.

Stoga, u radu je ispitana namera ponašanja prema zelenim bankarskim uslugama u svetlu teorije planiranog ponašanja, uključujući moderirajuće efekte ekološke svesti. Budući da su uticaji stavova, percipirane kontrole ponašanja i subjektivnih normi na nameru ponašanja već ispitani, fokus istraživanja bio je na moderaciji. Rezultati su pokazali da je ekološka svest moderirala odnos između percipirane kontrole ponašanja i namere ponašanja. Stoga, iako ljudi mogu imati resurse i znanje potrebne za usvajanje zelenih bankarskih usluga, uticaj na nameru ponašanja zavisi od njihovog nivoa ekološke svesti. Pri tome, povećanje ekološke svesti jača efekat percipirane kontrole ponašanja na nameru ponašanja.

Imajući u vidu dobijene rezultate, banke treba da obrate pažnju na edukaciju i informisanje ljudi o konceptu zelenog bankarstva. U tu svrhu, mogu koristiti različite medije, kao što su veb sajtovi, društvene mreže, itd. Određena predavanja i prezentacije o zelenom bankarstvu mogla bi biti organizovana u saradnji sa obrazovnim institucijama. Pored toga, fokus treba da bude na olakšavanju korišćenja ovih vrsta usluga i tehnologija, kao i na obezbeđivanju uslova potrebnih za njihovu primenu (Taneja i Ali, 2021).

Zahvalnost

Ovo istraživanje je podržano od strane Pokrajinskog sekretarijata za visoko obrazovanje i naučnoistraživačku delatnost, Autonomna Pokrajina Vojvodina, Republika Srbija, u skladu sa projektom "Finansijski, marketing i menadžment aspekti energetske efikasnosti u funkciji održivog razvoja AP Vojvodine" - dugoročni projekat od posebnog interesa za održivi razvoj u AP Vojvodini 2021-2024. Broj projekta: 142-451-3381/2023.

Literatura

1. Ahmad, W., and Zhang, Q. 2020. Green purchase intention: Effects of electronic service quality and customer green psychology. *Journal of Cleaner Production*, 267: 1-17.
2. Ajzen, I. 1991. The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50: 179-211.
3. Ansu- Mensah, P. 2021. Green product awareness effect on green purchase intentions of university students': an emerging market's perspective. *Future Business Journal*, 7: 1-13.
4. Apostoaie, C-M., Bilan, I., and Poia, V. 2019. Green Banking: The Next Level in Modern Banking. *EconWorld2019*, Budapest, Hungary, 18-20 June, 2019, pp. 1-9.
5. Aracil, E., Nájera-Sánchez, J-J., and Forcadell, F.J. 2021. Sustainable banking: A literature review and integrative framework. *Finance Research Letters*, 42: 1-10.
6. Becker, J-M., Cheah, J-H., Gholamzade, R., Ringle, C.M., and Sarstedt, M. 2023. PLS-SEM's most wanted guidance. *International Journal of Contemporary Hospitality Management*, 35: 321-346.
7. Bhardwaj, B.R., and Malhotra, A. 2013. Green Banking Strategies: Sustainability through Corporate Entrepreneurship. *Greener Journal of Business and Management Studies*, 3: 180-193.
8. Bihade, V., and Karande, S. 2020. Customer satisfaction towards Green Banking (GB) Services. *Journal of Emerging Technologies and Innovative Research*, 7: 395-403.

9. Bouteraa, M., Hisham, R.R.I.R., and Zainol, Z. 2020. Islamic Banks Customers' Intention to Adopt Green Banking: Extension of UTAUT Model. *International Journal of Business and Technology Management*, 2: 121-136.
10. Bouteraa, M., Hisham, R.R.I.R., and Zainol, Z. 2021. Exploring Determinants of Customers' Intention to Adopt Green Banking: Qualitative Investigation. *Journal of Sustainability Science and Management*, 16: 187-203.
11. Bukhari, S.A.A., Hashim, F., and Amran, A. 2022. Pathways towards Green Banking adoption: moderating role of top management commitment. *International Journal of Ethics and Systems*, 38: 286-315.
12. Chew, B.C., Tan, L.H., and Hamid, S.R. 2016. Ethical banking in practice: a closer look at the Co-operative Bank UK PLC. *Qualitative Research in Financial Markets*, 8: 70-91.
13. Costa, C.S.R., da Costa, M.F., Maciel, R.G., Aguiar, E.C., and Wanderley, L.O. 2021. Consumer antecedents towards green product purchase intentions. *Journal of Cleaner Production*, 313: 1-9.
14. de Leaniz, P.M.G., Crespo, Á.H., and López, R.G. 2018. Customer responses to environmentally certified hotels: the moderating effect of environmental consciousness on the formation of behavioral intentions. *Journal of Sustainable Tourism*, 26: 1160-1177.
15. Garvey, A.M., and Bolton, L.E. 2017. Eco-Product Choice Cuts Both Ways: How Proenvironmental Licensing Versus Reinforcement Is Contingent on Environmental Consciousness. *Journal of Public Policy & Marketing*, 36: 284-298.
16. Hair, J.F., Hult, G.T.M., Ringle, C.M., and Sarstedt, M. 2017. *A Primer on Partial Least Squares Structural Equation Modeling*. Sage: Thousand Oaks, USA.
17. Herath, H.M.A.K., and Herath, H.M.S.P. 2019. Impact of Green Banking Initiatives on Customer Satisfaction: A Conceptual Model of Customer Satisfaction on Green Banking. *IOSR Journal of Business and Management*, 21: 24-35.
18. Ibe-enwo, G., Igbudu, N., Garanti, Z., and Popoola, T. 2019. Assessing the Relevance of Green Banking Practice on Bank Loyalty: The Mediating Effect of Green Image and Bank Trust. *Sustainability*, 11: 1-16.
19. Kamalanon, P., Chen, J-S., and Le, T-T-Y. 2022. "Why Do We Buy Green Products?" An Extended Theory of the Planned Behavior Model for Green Product Purchase Behavior. *Sustainability*, 14: 1-28.
20. Kautish, P., Paul, J., and Sharma, R. 2019. The moderating influence of environmental consciousness and recycling intentions on green purchase behavior. *Journal of Cleaner Production*, 228: 1425-1436.

21. Kumar, K., and Prakash, A. 2019. Developing a framework for assessing sustainable banking performance of the Indian banking sector. *Social Responsibility Journal*, 15: 689-709.
22. Lin, Y-C., and Chang, C.A. 2012. Double Standard: The Role of Environmental Consciousness in Green Product Usage. *Journal of Marketing*, 76: 125-134.
23. Liobikienė, G., Mandravickaitė, J., and Bernatoniene, J. 2016. Theory of planned behavior approach to understand the green purchasing behavior in the EU: A cross-cultural study. *Ecological Economics*, 125: 38-46.
24. Milicevic, N., Djokic, N., Mirovic, V., Djokic, I. and Kalas, B. 2023. Banking Support for Energy Security: The Customer Aspect. *Sustainability*, 15: 1-15.
25. Nimri, R., Patiar, A., and Jin, X. 2020. The determinants of consumers' intention of purchasing green hotel accommodation: Extending the theory of planned behaviour. *Journal of Hospitality and Tourism Management*, 45: 535-543.
26. Pariag-Maraye, N., Munusami, N., and Ansaram, K. 2017. A Customer's Perspective of Green Banking: A Case Study of Commercial Banks in Mauritius. *Theoretical Economics Letters*, 7: 1975-1985.
27. Park, H., and Kim, J.D. 2020. Transition towards green banking: role of financial regulators and financial institutions. *Asian Journal of Sustainability and Social Responsibility*, 5: 1-25.
28. Rai, R., Kharel, S., Devkota, N., and Paudel, U.R. 2019. Customers Perception on Green Banking Practices: A Desk Review. *The Journal of Economic Concerns*, 10: 82-95.
29. Rajan, C. 2020. An Empirical Study on the Impact of Covid 19 Pandemic on Green Banking Products and Services from Customer Perception. In *Proceedings of the Virtual National Conference On The COVID-19: Business Trends, Challenges and Opportunities*, Kristu Jayanti College, India, October 23rd, 2020.
30. Shafique, O., and Khan, M. 2020. Factors Affecting Bankers' Behavioral Intention to Adopt Green Banking: An Empirical Analysis of Banks in Pakistan. *Journal of Business and Social Review in Emerging Economies*, 6: 835-843.
31. Solekah, N.A. 2019. The Effect of Green Banking Product and Green Corporate Image on Green Customers Loyalty in Green Customers Satisfaction Syariah Banking Mediation. *Management and Economics Journal*, 3: 81-94.
32. Sultana, F., Dutta, S., and Khair, M.B. 2021. Green Banking and Customers' Satisfaction: A Case Study on the City Bank Limited of Bangladesh.

International Journal of Scientific Research in Multidisciplinary Studies, 7: 6-13.

33. Sun, H., Rabbani, M.R., Ahmad, N., Sial, M.S., Cheng, G., Zia-Ud-Din, M., and Fu, Q. 2020. CSR, Co-Creation and Green Consumer Loyalty: Are Green Banking Initiatives Important? A Moderated Mediation Approach from an Emerging Economy. *Sustainability*, 12: 1-22.
34. Taneja, S., and Ali, L. 2021. Determinants of customers' intentions towards environmentally sustainable banking: Testing the structural model. *Journal of Retailing and Consumer Services*, 59: 1-14.
35. Tara, K., Singh, S., and Kumar, R. 2015. Green Banking for Environmental Management: A Paradigm Shift. *Current World Environment*, 10: 1029-1038.
36. Ting, C-T., Hsieh, C-M., Chang, H-P., and Chen, H-S. 2019. Environmental Consciousness and Green Customer Behavior: The Moderating Roles of Incentive Mechanisms. *Sustainability*, 11: 1-16.
37. Vu, D.M., Ha, N.T., Ngo, T.V.N., Pham, H.T., and Duong, C.D. 2022. Environmental corporate social responsibility initiatives and green purchase intention: an application of the extended theory of planned behavior. *Social Responsibility Journal*, 18, (8): 1627-1645.
38. Wang, L., and Wong, P.P.W. 2021. Marketing of environmentally friendly hotels in China through religious segmentation: a theory of planned behaviour approach. *Tourism Review*, 76: 1164-1180.
39. Yadav, R., and Pathak, G.S. 2017. Determinants of Consumers' Green Purchase Behavior in a Developing Nation: Applying and Extending the Theory of Planned Behavior. *Ecological Economics*, 134: 114-122.

Datum prijema (Date received): 23.02.2025.

Izvršena prva korekcija (The first correction was made): 12.04.2025.

Datum prihvatanja (Date accepted): 20.05.2025.

BEHAVIOURAL INTENTION TOWARDS GREEN BANKING SERVICES: MODERATING EFFECTS OF ENVIRONMENTAL CONSCIOUSNESS

Nenad Djokic⁶, Vera Mirovic⁷, Nikola Milicevic⁸, Branimir Kalas⁹, Ines Djokic¹⁰

Abstract

To minimize negative effects on the environment, manifested through problems such as global warming, deforestation, and air pollution, different business and social entities need to make important decisions and implement certain changes in their activities. Among them, a significant contribution to the realization of the mentioned task can be expected from banks. Green banking services are just one of the solutions that can both decrease environmental risk and provide some benefits to customers. Hence, in this paper, attention is paid to those services, i.e. to the analysis of behavioral intention towards them. The model based on the theory of planned behavior (TPB) was applied, whereby, besides three main predictors, environmental consciousness was added as a moderator. For analyzing moderating effects, structural equation modeling was used. After presenting research results, certain implications have been provided.

Keywords: green banking, behavioral intention, theory of planned behavior, attitude, environmental consciousness, moderation.

JEL: M31, G21

Introduction

The processes of industrialization and globalization have brought many benefits by adding “a lot of comfort and luxury to human life”; however, they have also led to a warning situation concerning environmental degradation (Tara et al.,

⁶ Associate professor, Nenad Djokic, University of Novi Sad, Faculty of Economics in Subotica, Segedinski put 9-11, Subotica, Republic of Serbia, Phone: +381 24 628 217, E-mail: nenad.djokic@ef.uns.ac.rs

⁷ Associate professor, Vera Mirovic, University of Novi Sad, Faculty of Economics in Subotica, Segedinski put 9-11, Subotica, Republic of Serbia, Phone: +381 24 628 163, E-mail: vera.mirovic@ef.uns.ac.rs

⁸ Associate professor, Nikola Milicevic, University of Novi Sad, Faculty of Economics in Subotica, Segedinski put 9-11, Subotica, Republic of Serbia, Phone: +381 24 628 035, E-mail: nikola.milicevic@ef.uns.ac.rs

⁹ Assistant professor, Branimir Kalas, University of Novi Sad, Faculty of Economics in Subotica, Segedinski put 9-11, Subotica, Republic of Serbia, Phone: +381 24 628 163, E-mail: branimir.kalas@ef.uns.ac.rs

¹⁰ Associate professor, Ines Djokic, University of Novi Sad, Faculty of Economics in Subotica, Segedinski put 9-11, Subotica, Republic of Serbia, Phone: +381 24 628 133, E-mail: ines.djokic@ef.uns.ac.rs

2015, p. 1029). The report of the Intergovernmental Panel on Climate Change (IPCC) not only confirmed that human activities affected global warming but also pointed to its further acceleration, whereby between 2030 and 2052 it could reach the level of 1.5 °C higher than in the pre-industrial period (Park and Kim, 2020). The problem of global warming influences climate changes, and thus other aspects of human society, including health, food production, water availability, land usability, etc. (Shafique and Khan, 2020).

To alleviate the negative effects of global warming, significant changes need to be applied by different social and business entities. Among them, a special place belongs to banks, which besides financial development, can have a proactive role in ecological preservation as well (Bouteraa et al., 2020). In addition to the mobilization of financial resources (Aracil et al., 2021), the banking sector has an important function in providing support for the country's adjustment to climate change and improving its resilience to climate risks (Park and Kim, 2020). Therefore, as mentioned by Bukhari et al. (2022, p. 287) "the digitalization and greening of a country's economic system are largely dependent on the greening of the banking industry". Green banking can be of significant help in solving numerous environmental problems, referring to the loss of biodiversity, deforestation, climate change, and air quality issues; whereas, at the same time, it is enrolled in ensuring opportunities beneficial for customers (Chew et al., 2016).

Regarding environmental protection, an important role belongs to customers. In the last few decades, there have been certain changes concerning their awareness and consumption of green products and services; the rise of environmental awareness, among others, occurred as a result of greater media attention and increased consciousness of environmental damages (Ansu- Mensah, 2021). Becoming more acquainted with the negative consequences of their buying habits and decisions, customers started to change their attitudes regarding environmental issues (Costa et al., 2021). Preference for green products and services can be seen as an efficient way of protecting nature, whereby this trend is turning into a subculture (Ahmad and Zhang, 2020).

Having all previously mentioned in mind, in this paper, the emphasis is on customers' intention toward green banking services in the Autonomous Province of Vojvodina, Republic of Serbia. Therefore, explanations and characteristics of green banking were presented, as well as research with a similar theme. Following reviewed studies, we have set the model based on the theory of planned behavior (TPB). Hereby, in addition to attitude, perceived behavioral control, and subjective norms, the model included environmental consciousness as a moderator. After presenting the obtained results, the discussion and conclusion follow.

Green banking concept

Although the idea itself emerged in 1968, the root of today's concept of green banking lies in the foundation of Triodos Bank in 1980; the name of this bank originated from the Greek "tri hodos", meaning "three-way approach" (planet, people, and profit) (Apostoaie et al., 2019).

Green banking (GB) has been associated with other terms, such as ethical banking, environment-friendly banking, and sustainable banking (Bouteraa et al., 2020). In accordance with Rajan (2020), it correlates with the term Corporate Social Responsibility (CSR), whereas the focus is on environmental protection and the reduction of carbon emissions from banking services. However, despite the fact that those terms can be used as synonyms, green banking, as well as social banking, ethical banking, and CSR can be viewed within the context of sustainable banking, which covers all three aspects: environmental, ethical, and social (Kumar and Prakash, 2019). It implies that banks should create an adequate business model based on components such as profit, people, as well as, the planet.

In regard to the GB concept, there are many explanations related to this term. Following the Green Banking Report, "GB refers to the implementation, support, and promotion of environmentally friendly practices and reduction of the carbon footprint in the internal and external operations of banks" (Apostoaie et al., 2019, p. 3). Park and Kim (2020, p. 4) defined green banking "as financing activities by banking and non-banking financial institutions with an aim to reduce greenhouse gas emissions and increase the resilience of the society to negative climate change impacts while considering other sustainable development goals such as economic growth, job creation, and gender equality". For Bhardwaj and Malhotra (2013, p. 181) GB represents "the banking business conducted in such areas and in such a manner that helps the overall reduction of external carbon emission and internal carbon footprint". According to Bukhari et al. (2022), green banking can be considered a banking ideology whose adoption should lead to the inclusion of environmental ethic values in everyday banking activities and its financing portfolio. As mentioned in the research of Ibe-enwo et al. (2019), a green bank refers to a value-driven banking system that fulfills customers' wants by providing the safeness of their investments, deposits, and the environment.

When it comes to green banking products and services, Park and Kim (2020) distinguished six main categories: loan, insurance, securitization, equity investment, brokerage and market-making, and technical assistance. In relation to individual clients, besides financing green start-ups and projects, special attention should be dedicated to personal loans for purchasing energy-efficient and eco-friendly products and vehicles.

Conceptual model and hypotheses

When analyzing green banking services, special attention should be dedicated to the demand side. Hence, there is a number of research in which the emphasis is on customers, i.e. on their intentions to use this type of service. Subjects of those were customers' awareness of the green banking concept (Pariag-Maraye et al., 2017), customers' perception of green banking practices (Rai et al., 2019), customer satisfaction (Bihade and Karande, 2020; Herath and Herath, 2019; Solekah, 2019; Sultana et al., 2021), and loyalty (Ibe-enwo et al., 2019; Solekah, 2019; Sun et al., 2020).

In addition, in certain studies, the emphasis was on customers' intention towards green banking services. Some of them were based on the application of the unified theory of acceptance and use of technology (UTAUT). Bouteraa et al. (2020) proposed a model, which in addition to customer intention consists of four UTAUT factors (performance expectancy, efforts expectancy, social influence, and facilitating condition) and religiosity. There is also a proposal according to which customer intention to adopt green banking can be determined by UTAUT factors and eight more variables, categorized into four main groups: individual dimensions (personal innovativeness, awareness, and perceived benefit), organization dimensions (system quality and top management support), technology (security & privacy) and environment (government support and vendor support) (Bouteraa et al., 2021).

Besides the UTAUT, the theory of planned behavior (TPB) was applied as well. In addition to intention and behavior, this theory includes three more variables: attitude toward the behavior, subjective norm (the perception of social pressure about performing or not performing the behavior), and the perception of behavioral control (Ajzen, 1991). The TPB approach has already been used in several studies for analyzing purchase intention and/or behavior regarding green products and services (Kamalanon et al., 2022; Liobikienė et al., 2016; Nimri et al., 2020; Ting et al., 2019; Vu et al., 2022; Wang and Wong, 2021; Yadav and Pathak, 2017). On this basis, Taneja and Ali (2021) investigated customer intention toward environmentally sustainable banking services. In addition to attitude, perceived behavioral control, and subjective norms (as main TPB antecedents of behavioral intention), their model included three more variables (trust, perceived environmental outcomes, and environmental consciousness).

Milicevic et al. (2023) also relied on the application of the TPB approach for examining the intention to use green banking services. The subjects of the analysis were the influences of four predictors – three TPB antecedents and environmental consciousness, with gender as a moderator.

In studies related to green products or services, environmental consciousness, i.e. “the degree to which a person is oriented toward concern for the environment”

(Lin and Chang, 2012, p. 127), was not only used as a predictor, but as a moderator, as well. Lin and Chang (2012), among others, analyzed its moderating role in regular vs. green product usage. Garvey and Bolton (2017) have shown that environmental consciousness moderated the influence of eco-product choice on environmentally responsible behavior. The moderating role of environmental consciousness was examined in the context of behavioral intentions toward environmentally certified hotels (de Leaniz et al., 2018). Kautish et al. (2019) investigated moderating effects of environmental consciousness and recycling intentions on green purchase behavior in light of TPB theory, whereby significant moderations of environmental consciousness were detected in the relationship between perceived consumer effectiveness and green purchase behavior, as well as between willingness to be environmentally friendly and green purchase behavior.

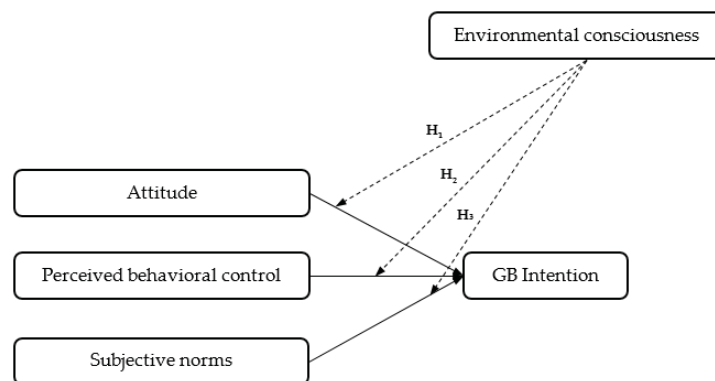
Relying on the research of Milicevic et al. (2023), we set the model presented in Figure 1. Bearing in mind that relations between TPB predictors and behavioral intention have already been examined in the previously mentioned study, the focus of this paper was on moderating effects. Hence, we tested the following hypotheses:

H₁. Environmental consciousness moderates the effect of attitude on customer intention toward green banking services.

H₂. Environmental consciousness moderates the effect of perceived behavioral control on customer intention toward green banking services.

H₃. Environmental consciousness moderates the effect of subjective norms on customer intention toward green banking services.

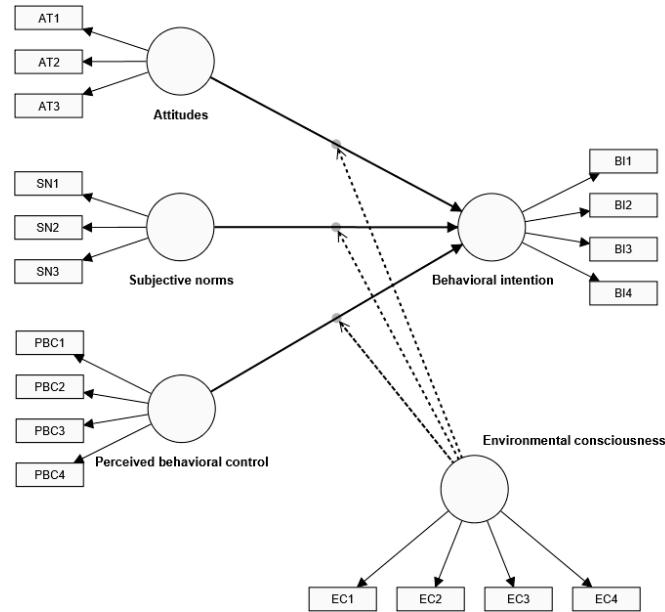
Figure 1. Conceptual model



Materials and Methods

In the research, we used the convenience sample which consisted of 733 respondents from the Autonomous Province of Vojvodina (Republic of Serbia). On average, they were more than 34 years old, whereby the majority of them (about 65%) were female. Data were processed in SmartPLS 4 software in 2024.

Figure 2. Statistical model



Our statistical model (presented in Figure 2) included behavioral intention (BI), as an independent construct; attitude (AT), perceived behavioral control (PBC), and subjective norms (SN), as its main predictors; and environmental consciousness (EC), as a moderator.

The items used in the research were assessed on a five-point Likert scale (from “strongly disagree” to “strongly agree”). Four of five constructs (perceived behavioral control (PBC1 – PBC4), subjective norms (SN1 – SN3), attitude (AT1 – AT3), and behavioral intention (BI1 – BI4)) were measured in accordance with Taneja and Ali (2021), while for measuring environmental consciousness (EC1 – EC4), we relied on Costa et al. (2021).

The mentioned constructs were treated as reflective, because of which, the subjects of the analysis were individual indicator reliability (assessed by outer loadings), internal consistency reliability (assessed by composite reliability (CR)), convergent validity (assessed by average variance extracted (AVE)) and discriminant validity (assessed by the use of HTMT approach) (Hair et al., 2017).

On the level of a structural model, we checked for potential multicollinearity issues by examining the inner VIF values of predictor constructs. To test the

hypotheses, we considered the significance of path coefficients regarding three interaction terms (AT*EC, PBC*EC, and SN*EC), as well as their substantialness by examining the f^2 effect sizes (Becker et al., 2023).

Results and discussion

All reflective constructs (behavioral intention, attitude, subjective norms, perceived behavioral control, and environmental consciousness) have been tested for reliability and validity. These results are presented in Table 1.

Table 1. Reflective constructs - quality criteria

Constructs and items	Loadings	AVE	CR
Perceived behavioral control		0.737	0.918
PBC1	0.805		
PBC2	0.905		
PBC3	0.897		
PBC4	0.822		
Subjective norms		0.655	0.850
SN1	0.887		
SN2	0.803		
SN3	0.731		
Attitude		0.675	0.862
AT1	0.798		
AT2	0.786		
AT3	0.879		
Behavioral intention		0.759	0.926
BI1	0.846		
BI2	0.889		
BI3	0.900		
BI4	0.849		
Environmental consciousness		0.726	0.914
EC1	0.820		
EC2	0.856		
EC3	0.864		
EC4	0.867		

Source: Authors

Outer loadings for all indicators were higher than 0.7, confirming individual indicator reliability. In addition, AVE and CR values were also satisfactory, i.e. higher than 0.5 and 0.7, respectively.

The results of discriminant validity testing are presented in Table 2.

Table 2. Discriminant validity - HTMT approach

	HTMT
Behavioral intention -> Attitude	0.712
Environmental consciousness -> Attitude	0.307
Environmental consciousness -> Behavioral intention	0.281
Perceived behavioral control -> Attitude	0.314

Perceived behavioral control -> Behavioral intention	0.377
Perceived behavioral control -> Environmental consciousness	0.108
Subjective norms -> Attitude	0.560
Subjective norms -> Behavioral intention	0.342
Subjective norms -> Environmental consciousness	0.055
Subjective norms -> Perceived behavioral control	0.577

Source: Authors

As HTMT values for all pairs were below the threshold of 0.85, it can be concluded that discriminant validity was established.

The R^2 value equaled 0.415. When it comes to multicollinearity, there were no issues bearing in mind that all inner VIF values were lower than 5. Coefficients for each relation, followed by their p-values are presented in Table 3.

Table 3. Path coefficients – Hypotheses testing

Path coefficients	Direct effect	p-value
Attitude → Behavioral intention	0.522	0.000
Perceived behavioral control → Behavioral intention	0.238	0.000
Subjective norms → Behavioral intention	-0.050	0.167
AT*EC → Behavioral intention	-0.045	0.091
PBC*EC → Behavioral intention	0.063	0.071
SN*EC → Behavioral intention	-0.045	0.219

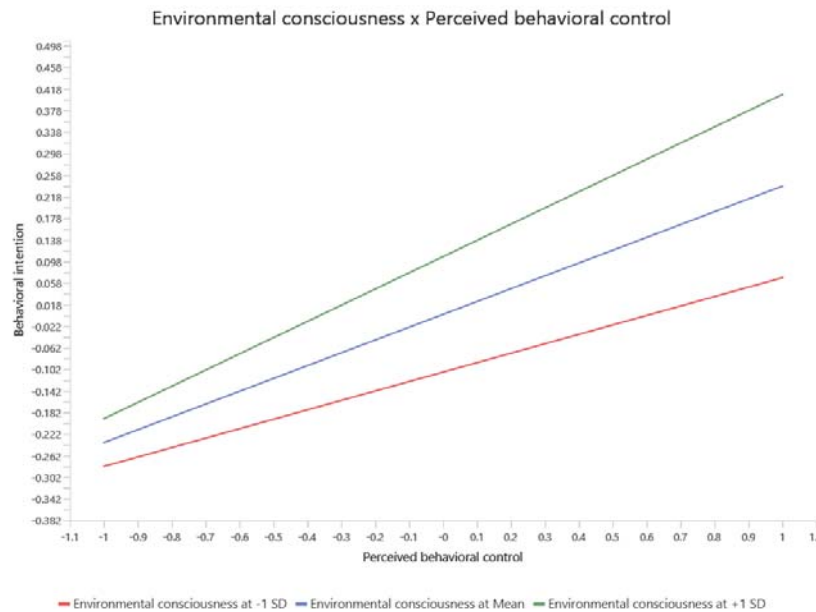
Source: Authors

In the case of main TPB predictors, positive effects on behavioral intention were recorded for attitude and perceived behavioral control. These effects were also significant with p lower than 0.05. On the other hand, subjective norms had a negative influence on behavioral intention with a p-value higher than 0.05. Bearing in mind that all three coefficients were obtained in the model which included the moderator, they present „simple effects“, and can be used for interpreting the results of moderation analysis (Hair et al., 2017).

When it comes to interaction terms, two of them (AT*EC and SN*EC) negatively affected behavioral intention, while the effect of PBC*EC was positive. However, their p-values were higher than 0.05, whereas, for AT*EC and PBC*EC, they were below 0.1. Additionally, we checked whether those two effects were substantial, by analyzing their f^2 effect sizes. The f^2 value exceeded the lower bound of 0.005 only in the case of the PBC*EC interaction term. As it equaled 0.006, this effect was considered weak (Becker et al., 2023). Hereby, with a certain level of caution, only hypothesis H₂ could be confirmed. Therefore, following Hair et al. (2017), if the mean value of environmental consciousness increases by one standard deviation (SD), the relation between PBC and behavioral intention would increase to a value of 0.301 (0.238 + 0.063). This can

also be seen in Figure 3, where the green line (environmental consciousness at + 1 SD) is steeper than the blue line (environmental consciousness at mean).

Figure 3. Simple slope analysis



Regarding similar studies, when examining the moderating effects of environmental consciousness, Kautish et al. (2019), among others, found a positive and significant influence of PBC on green purchase behavior in the case of high environmental consciousness consumer group, while in the case of low environmental consciousness group, it was insignificant.

Conclusions

To protect the environment, customers, as well as different organizations need to change their activities – to become greener. Among them, a special place belongs to banks, which both directly and indirectly can contribute to achieving sustainable development goals. Through the provision of green services, banks may bring many benefits, not only environmental-related but those associated with customers as well.

Hence, the paper examined behavioral intention toward green banking services in light of the theory of planned behavior, including moderating effects of environmental consciousness. As the impacts of attitudes, perceived behavioral control, and subjective norms on behavioral intention have already been examined, the focus of the research was on moderation. The results have shown that environmental consciousness moderated the relationship between perceived behavioral control and behavioral intention. Therefore, although people may have the resources and knowledge needed to adopt green banking services, the impact

on behavioral intention depends on their level of environmental consciousness. Hereby, the increase in environmental consciousness strengthens the effect of PBC on behavioral intention.

Keeping in mind the obtained results, banks should pay attention to educating and informing people about the concept of green banking. For this purpose, they can use different media, such as websites, social networks, etc. Certain lectures and presentations concerning green banking could be organized in cooperation with educational institutions. In addition, the focus should be on facilitating the use of these types of services and technologies, as well as on the availability of conditions required for their application (Taneja and Ali, 2021).

Acknowledgment

This research was funded by Provincial Secretariat for Higher Education and Scientific Research, AP Vojvodina, Republic of Serbia, in accordance to the project “Financial, marketing and management aspect of energy efficiency in the function of sustainable development of the AP Vojvodina” – long-term project of special interest for sustainable development in AP Vojvodina 2021-2024. Project number: 142-451-3381/2023.

References

1. Ahmad, W., and Zhang, Q. 2020. Green purchase intention: Effects of electronic service quality and customer green psychology. *Journal of Cleaner Production*, 267: 1-17.
2. Ajzen, I. 1991. The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50: 179-211.
3. Ansu- Mensah, P. 2021. Green product awareness effect on green purchase intentions of university students’: an emerging market’s perspective. *Future Business Journal*, 7: 1-13.
4. Apostoaie, C-M., Bilan, I., and Poia, V. 2019. Green Banking: The Next Level in Modern Banking. *EconWorld2019*, Budapest, Hungary, 18-20 June, 2019, pp. 1-9.
5. Aracil, E., Nájera-Sánchez, J-J., and Forcadell, F.J. 2021. Sustainable banking: A literature review and integrative framework. *Finance Research Letters*, 42: 1-10.
6. Becker, J-M., Cheah, J-H., Gholamzade, R., Ringle, C.M., and Sarstedt, M. 2023. PLS-SEM’s most wanted guidance. *International Journal of Contemporary Hospitality Management*, 35: 321-346.
7. Bhardwaj, B.R., and Malhotra, A. 2013. Green Banking Strategies: Sustainability through Corporate Entrepreneurship. *Greener Journal of Business and Management Studies*, 3: 180-193.

8. Bihade, V., and Karande, S. 2020. Customer satisfaction towards Green Banking (GB) Services. *Journal of Emerging Technologies and Innovative Research*, 7: 395-403.
9. Bouteraa, M., Hisham, R.R.I.R., and Zainol, Z. 2020. Islamic Banks Customers' Intention to Adopt Green Banking: Extension of UTAUT Model. *International Journal of Business and Technology Management*, 2: 121-136.
10. Bouteraa, M., Hisham, R.R.I.R., and Zainol, Z. 2021. Exploring Determinants of Customers' Intention to Adopt Green Banking: Qualitative Investigation. *Journal of Sustainability Science and Management*, 16: 187-203.
11. Bukhari, S.A.A., Hashim, F., and Amran, A. 2022. Pathways towards Green Banking adoption: moderating role of top management commitment. *International Journal of Ethics and Systems*, 38: 286-315.
12. Chew, B.C., Tan, L.H., and Hamid, S.R. 2016. Ethical banking in practice: a closer look at the Co-operative Bank UK PLC. *Qualitative Research in Financial Markets*, 8: 70-91.
13. Costa, C.S.R., da Costa, M.F., Maciel, R.G., Aguiar, E.C., and Wanderley, L.O. 2021. Consumer antecedents towards green product purchase intentions. *Journal of Cleaner Production*, 313: 1-9.
14. de Leaniz, P.M.G., Crespo, Á.H., and López, R.G. 2018. Customer responses to environmentally certified hotels: the moderating effect of environmental consciousness on the formation of behavioral intentions. *Journal of Sustainable Tourism*, 26: 1160-1177.
15. Garvey, A.M., and Bolton, L.E. 2017. Eco-Product Choice Cuts Both Ways: How Proenvironmental Licensing Versus Reinforcement Is Contingent on Environmental Consciousness. *Journal of Public Policy & Marketing*, 36: 284–298.
16. Hair, J.F., Hult, G.T.M., Ringle, C.M., and Sarstedt, M. 2017. *A Primer on Partial Least Squares Structural Equation Modeling*. Sage: Thousand Oaks, USA.
17. Herath, H.M.A.K., and Herath, H.M.S.P. 2019. Impact of Green Banking Initiatives on Customer Satisfaction: A Conceptual Model of Customer Satisfaction on Green Banking. *IOSR Journal of Business and Management*, 21: 24-35.
18. Ibe-enwo, G., Igbudu, N., Garanti, Z., and Popoola, T. 2019. Assessing the Relevance of Green Banking Practice on Bank Loyalty: The Mediating Effect of Green Image and Bank Trust. *Sustainability*, 11: 1-16.
19. Kamalanon, P., Chen, J-S., and Le, T-T-Y. 2022. "Why Do We Buy Green Products?" An Extended Theory of the Planned Behavior Model for Green Product Purchase Behavior. *Sustainability*, 14: 1-28.

20. Kautish, P., Paul, J., and Sharma, R. 2019. The moderating influence of environmental consciousness and recycling intentions on green purchase behavior. *Journal of Cleaner Production*, 228: 1425-1436.
21. Kumar, K., and Prakash, A. 2019. Developing a framework for assessing sustainable banking performance of the Indian banking sector. *Social Responsibility Journal*, 15: 689-709.
22. Lin, Y-C., and Chang, C.A. 2012. Double Standard: The Role of Environmental Consciousness in Green Product Usage. *Journal of Marketing*, 76: 125-134.
23. Liobikienė, G., Mandravickaitė, J., and Bernatoniene, J. 2016. Theory of planned behavior approach to understand the green purchasing behavior in the EU: A cross-cultural study. *Ecological Economics*, 125: 38-46.
24. Milicevic, N., Djokic, N., Mirovic, V., Djokic, I. and Kalas, B. 2023. Banking Support for Energy Security: The Customer Aspect. *Sustainability*, 15: 1-15.
25. Nimri, R., Patiar, A., and Jin, X. 2020. The determinants of consumers' intention of purchasing green hotel accommodation: Extending the theory of planned behaviour. *Journal of Hospitality and Tourism Management*, 45: 535-543.
26. Pariag-Maraye, N., Munusami, N., and Ansaram, K. 2017. A Customer's Perspective of Green Banking: A Case Study of Commercial Banks in Mauritius. *Theoretical Economics Letters*, 7: 1975-1985.
27. Park, H., and Kim, J.D. 2020. Transition towards green banking: role of financial regulators and financial institutions. *Asian Journal of Sustainability and Social Responsibility*, 5: 1-25.
28. Rai, R., Kharel, S., Devkota, N., and Paudel, U.R. 2019. Customers Perception on Green Banking Practices: A Desk Review. *The Journal of Economic Concerns*, 10: 82-95.
29. Rajan, C. 2020. An Empirical Study on the Impact of Covid 19 Pandemic on Green Banking Products and Services from Customer Perception. In *Proceedings of the Virtual National Conference On The COVID-19: Business Trends, Challenges and Opportunities*, Kristu Jayanti College, India, October 23rd, 2020.
30. Shafique, O., and Khan, M. 2020. Factors Affecting Bankers' Behavioral Intention to Adopt Green Banking: An Empirical Analysis of Banks in Pakistan. *Journal of Business and Social Review in Emerging Economies*, 6: 835-843.
31. Solekah, N.A. 2019. The Effect of Green Banking Product and Green Corporate Image on Green Customers Loyalty in Green Customers Satisfaction Syariah Banking Mediation. *Management and Economics Journal*, 3: 81-94.

32. Sultana, F., Dutta, S., and Khair, M.B. 2021. Green Banking and Customers' Satisfaction: A Case Study on the City Bank Limited of Bangladesh. *International Journal of Scientific Research in Multidisciplinary Studies*, 7: 6-13.
33. Sun, H., Rabbani, M.R., Ahmad, N., Sial, M.S., Cheng, G., Zia-Ud-Din, M., and Fu, Q. 2020. CSR, Co-Creation and Green Consumer Loyalty: Are Green Banking Initiatives Important? A Moderated Mediation Approach from an Emerging Economy. *Sustainability*, 12: 1-22.
34. Taneja, S., and Ali, L. 2021. Determinants of customers' intentions towards environmentally sustainable banking: Testing the structural model. *Journal of Retailing and Consumer Services*, 59: 1-14.
35. Tara, K., Singh, S., and Kumar, R. 2015. Green Banking for Environmental Management: A Paradigm Shift. *Current World Environment*, 10: 1029-1038.
36. Ting, C-T., Hsieh, C-M., Chang, H-P., and Chen, H-S. 2019. Environmental Consciousness and Green Customer Behavior: The Moderating Roles of Incentive Mechanisms. *Sustainability*, 11: 1-16.
37. Vu, D.M., Ha, N.T., Ngo, T.V.N., Pham, H.T., and Duong, C.D. 2022. Environmental corporate social responsibility initiatives and green purchase intention: an application of the extended theory of planned behavior. *Social Responsibility Journal*, 18, (8): 1627-1645.
38. Wang, L., and Wong, P.P.W. 2021. Marketing of environmentally friendly hotels in China through religious segmentation: a theory of planned behaviour approach. *Tourism Review*, 76: 1164-1180.
39. Yadav, R., and Pathak, G.S. 2017. Determinants of Consumers' Green Purchase Behavior in a Developing Nation: Applying and Extending the Theory of Planned Behavior. *Ecological Economics*, 134: 114-122.