Akademija strukovnih studija Kosovsko Metohijska
Odsek Peć – Leposavić

Ekonomski signali

Volumen 21, Broj 1, 2026

ISSN 1452-4457 (štampa)
E-ISSN 2560-3302 (online)

Ekonomski signali

Izdavač (Publisher): Akademija strukovnih studija Kosovkso Metohijska, odsek Peć - Leposavić (Kosovo and Metohija Trades Academy, department Pec - Leposavic)
Suizdavač (Co-publisher): Institut za srpsku kulturu u Prištini - Leposavić
Adresa redakcije (Editorial Adress): Leposavić, Dositeja Obradovića b.b.
web: www.ekonomskisignali.edu.rs e-mail: ekonomski.signali@gmail.com
Za izdavača: (For the Publisher): Predsednik Akademije (President of the Academy: dr Milan Mišić, prof.s.s.
Glavni i odgovorni urednik (Editor-in-Chief): prof. dr Boris Siljković
Zamenik glavnog i odgovornog urednika (Deputy Editor-in-Chief): doc. dr Marko Savić
Sekretar redakcije i organizator marketinga (Editorial Secretary and Marketing Associate): doc.dr Nikola Pavlović
Zamenik sekretara redakcije (Deputy Editorial Secretary): Nikola Milošević, PhD Student in Economics Faculty of Economics, University of Belgrade
Tehnički urednik (Technical Editor): Raša Đorđević
Pomočnik tehničkog urednika (Assistant Technical Editor) Sanel Mehmedi, PhD Student Faculty of Finance and Business, Alfa BK University
Tiraž (Circulation): 100
Štampa (Printed by): „GRAFIKOLOR Vujović“ Kraljevo
Časopis izlazi polugodišnje (Journal is being published semiannually).

Svojim pristupom, uz angažovanje recenzenata časopis Ekonomski signali čuva kvalitet i ugled časopisa od nacionalnog značaja, primenjujući stručnu evaluaciju. Izdavač ne snosi odgovornost za istinost i verodostojnost objavljenih oglasa - reklama. Tekstovi izražavaju stav autora. Autor garantuje da su tekstovi originalni i autentični i da nisu prethodno objavljivani. Lekturu teksta vrši autor.

Odlukom matičnog naučnog odbora za društvene nauke Ministarstva prosvete nauke i tehnološkog razvoja časopis Ekonomski signali je registrovan na listi nacionalnih časopisa u kategoriji M52.

With its approach and the involvement of reviewers, journal Ekonomski signali will maintain the quality and reputation of the journal of national importance, applying expert evaluation. Publisher is not responsible for the credibility and trust- worthiness of published ads-commercials. Manu-scripts express the views of the authors. The author guarantees that the texts are original and authentic and have not been previously published. Proofreading of the text is done by the author.

By the decision of the scientific committee for social sciences of the Ministry of Education, Science and Technological Development, journal Ekonomski signali is registered on the list of national journals within the M52 category.

Reč urednika

Dobrodošli u najnovije izdanje našeg i vašeg poslovnog magazina „*Ekonomski Signali*". U ovom **prvom broju za 2026. godinu** radovi su nastali u uslovima izazova i prilika koje okružuju složena ekonomska i politička dešavanja u svetu, aktuelne ratne i ekonomske krize u Iranu i Ukrajini i na globalnom nivou, kao direktnu posledicu sukoba velikih sila istoka i zapada i njihovih satelita u svetu. Nadamo se da će vam sadržaj ovog broja pružiti korisne uvide u važnost aktuelnih praćenja ekonomskih prilika u svetu, izabranih autora kroz radove koji su nastali kao refleksija dešavanja krize na globalnom nivou. Prvi rad pod naslovom **„Determinante rasta nominalnog bruto domaćeg proizvoda u zemljama Zapadnog Balkana: panel analiza za period 2008–2024", autora Miloša Golubovića i Gordana Jankovića**, se bavi analizom determinanti rasta nominalnog bruto domaćeg proizvoda u zemljama Zapadnog Balkana Srbiji, Crnoj Gori, Severnoj Makedoniji, Bosni i Hercegovini i Albaniji. u periodu od 2008. do 2024. godine. Cilj istraživanja ovih autora je bio da se utvrdi relativni značaj fiskalnih, realnih, cenovnih i eksternih faktora u objašnjenju dinamike nominalnog privrednog rasta. Empirijska analiza zasnovana je na panel uzorku koji obuhvata Srbiju, Crnu Goru, Severnu Makedoniju, Bosnu i Hercegovinu i Albaniju, pri čemu je primenjen Pooled OLS model sa robusnim standardnim greškama. Rezultati istraživanja su pokazali da su ključni pokretači nominalnog privrednog rasta rast državnih rashoda, veća otvorenost privrede i rast realnog bruto domaćeg proizvoda, pri čemu se rast realnog BDP-a izdvaja kao najstabilniji i statistički najznačajniji faktor. Nasuprot tome, inflacija i rast javnog duga nisu pokazali statistički značajan uticaj na nominalni rast. Dobijeni nalazi ukazuju na to da je nominalni privredni rast u posmatranim ekonomijama pre svega rezultat rasta realne ekonomske aktivnosti i ekspanzivne fiskalne politike, dok spoljnotrgovinska otvorenost takođe ima značajnu ulogu.

Drugi rad pod nazivom **„Uticaj BPR na povećanje efekata ad valorem poreza kao i uloga biznis plana u održavanju monopolske ravnoteže i tržišne moći", autora Mehmeda Mete i Nedeljke Dedović,** razmatra međusobnu povezanost reinženjeringa poslovnih procesa, poslovnog planiranja i poreske politike u uslovima monopolskog poslovanja. Autori ukazuju na značaj primene reinženjeringa poslovnih procesa kao instrumenta unapređenja organizacione efikasnosti i racionalizacije troškova, dok se biznis plan posmatra kao važan element strateškog upravljanja i očuvanja konkurentske pozicije preduzeća. Posebna pažnja posvećena je ulozi *ad valorem* poreza kao regulatornog instrumenta kojim se mogu ublažiti negativni efekti monopolske tržišne moći i doprineti uspostavljanju ravnoteže između interesa proizvođača, države i potrošača. Kroz teorijsku analizu tržišne ravnoteže i ponašanja monopolskog preduzeća, rad pruža celovit prikaz odnosa između poslovne efikasnosti, poreske regulative i ekonomskih efekata monopolskog poslovanja. Aktuelnost obrađene tematike ogleda se u njenom interdisciplinarnom pristupu, koji povezuje menadžment poslovnih procesa, strateško planiranje i mikroekonomsku analizu tržišnih struktura. Na taj način rad predstavlja koristan doprinos razumevanju mehanizama regulacije monopola i može biti od značaja kako za naučnu i stručnu javnost, tako i za kreatore ekonomskih politika i menadžere koji se bave unapređenjem poslovne efikasnosti i tržišne konkurentnosti.

Treći rad pod naslovom **„Savremeni platni sistemi u Republici Srbiji: thenološka transformacija, stavovi korisnika i strateške perspektive“, autora Miloša Milanovića, Nikole Pavlovića i Marka Savića,** pruža sveobuhvatnu analizu razvoja platnih sistema u Republici Srbiji, povezujući institucionalne i tehnološke inovacije sa ponašanjem korisnika na tržištu finansijskih usluga. Posebna pažnja posvećena je modernizaciji platne infrastrukture kroz razvoj nacionalnih platnih rešenja, unapređenje bezbednosnih standarda i širenje sistema instant plaćanja, kao ključnih elemenata digitalne transformacije finansijskog sistema. Vrednost ovog istraživanja ogleda se u objedinjavanju analize institucionalnog okvira sa empirijskim ispitivanjem stavova korisnika prema savremenim digitalnim instrumentima plaćanja. Rezultati ukazuju da, uprkos visokom nivou tehnološke razvijenosti platne infrastrukture, dalji razvoj bezgotovinskog poslovanja ograničavaju faktori poput nedovoljnog poverenja korisnika i dugotrajnih navika oslanjanja na gotovinska plaćanja. Ovakvi nalazi potvrđuju da uspešna digitalna transformacija finansijskog sistema podrazumeva istovremeno unapređenje tehnoloških rešenja, regulatornog okvira i finansijske pismenosti stanovništva. Poseban doprinos rada stručnoj i naučnoj javnosti predstavlja sagledavanje budućih pravaca razvoja platnog sistema Republike Srbije u kontekstu usklađivanja sa evropskim regulatornim standardima i procesa integracije u Jedinstveno područje plaćanja u evrima (SEPA). Predložene smernice za unapređenje transparentnosti, zaštite korisnika i efikasnosti platnih usluga predstavljaju korisnu osnovu za donosioce ekonomskih politika, finansijske institucije i istraživače koji se bave digitalizacijom finansijskog sektora.

U savremenim uslovima globalizacije, digitalne transformacije i sve izraženije međuzavisnosti tržišnih aktera, poslovni odnosi između organizacija postaju jedan od ključnih izvora konkurentske prednosti i održivog ekonomskog razvoja. Globalno poslovno tržište karakterišu složene mreže partnerstava, intenzivna razmena informacija i znanja, kao i rastući značaj dugoročnih odnosa zasnovanih na poverenju, koordinaciji i zajedničkom stvaranju vrednosti. U tom kontekstu, razumevanje odnosa, interakcija i komunikacije u poslovnom okruženju predstavlja značajnu istraživačku oblast savremene marketinške teorije i prakse. **Četvrti rad** pod nazivom **„Odnosi, interakcije i komunikacija na globalnom poslovnom tržištu: konceptualni okvir“, autora Željka Devića, Branke Spasojević i Ive Đelošević,** bavi se sistematizacijom i konceptualizacijom ključnih elemenata koji oblikuju savremene interorganizacione odnose u globalnom *business-to-business* (B2B) okruženju. Polazeći od relevantnih teorijskih pristupa i rezultata savremenih istraživanja, autori razvijaju integrativni konceptualni okvir koji omogućava sveobuhvatnije razumevanje međusobne povezanosti odnosa, interakcija i komunikacionih procesa u savremenim poslovnim mrežama. Posebna vrednost rada ogleda se u njegovom interdisciplinarnom pristupu, kojim se povezuju teorijska dostignuća iz oblasti marketinga, menadžmenta i organizacionih studija sa aktuelnim izazovima globalnog poslovanja. Ukazuje se na značaj sinergijskog delovanja, komunikacije, međusobnih interakcija i kvalitetnih poslovnih odnosa u kreiranju održivih konkurentskih prednosti, unapređenju saradnje među poslovnim partnerima i efikasnijem odgovoru organizacija na dinamične promene tržišnog okruženja. Konceptualni okvir predstavljen u radu pruža korisnu osnovu za dalja empirijska istraživanja interorganizacionih odnosa, ali i za razvoj savremenih marketinških i poslovnih strategija usmerenih ka stvaranju dugoročne vrednosti za sve relevantne stejkholdere. Time ovaj rad predstavlja značajan doprinos unapređenju teorijskih saznanja o funkcionisanju globalnog B2B tržišta i otvara nove pravce istraživanja u oblasti poslovnih odnosa, komunikacije i upravljanja poslovnim mrežama. Otuda se veruje da će rezultati i teorijska razmatranja izneta u ovom radu biti od koristi istraživačima, nastavnicima, studentima i privrednicima koji se bave marketingom, međunarodnim poslovanjem i upravljanjem interorganizacionim odnosima, kao i svima koji nastoje da razumeju savremene tokove razvoja globalnog poslovnog okruženja.

Bankarski sektor u savremenim uslovima poslovanja prolazi kroz intenzivne strukturne promene uslovljene procesima globalizacije, digitalne transformacije i pojačane konkurencije na finansijskim tržištima. U takvom okruženju, strateške odluke koje se odnose na konsolidaciju kapitala i organizaciono restrukturiranje postaju jedan od ključnih mehanizama jačanja stabilnosti i konkurentnosti banaka.

Peti rad **„Spajanja i akvizicije banaka kao strategija izbora u poslovnom odlučivanju“, autora Mirjane Mrvaljević, Gordane Jovanović i Jasminke Đuričanin,** analizira ulogu spajanja i akvizicija kao jednog od najznačajnijih instrumenata savremenog bankarskog restrukturiranja. Poseban akcenat stavljen je na njihov doprinos unapređenju konkurentske pozicije, efikasnosti poslovanja i prilagođavanju promenljivim tržišnim uslovima, uz sagledavanje specifičnosti bankarskog sektora Republike Srbije. Značaj ovog rada ogleda se u sveobuhvatnom pristupu koji povezuje teorijske aspekte strateškog odlučivanja sa praktičnim implikacijama procesa integracije banaka. Autori ukazuju na to da spajanja i akvizicije mogu doprineti povećanju tržišne koncentracije, optimizaciji operativnih troškova i proširenju spektra bankarskih usluga, ali istovremeno naglašavaju i postojanje značajnih organizacionih i operativnih rizika koji prate ove procese. Uredništvo smatra da rad pruža relevantan doprinos razumevanju savremenih trendova u bankarskom sektoru, posebno u domenu strateškog odlučivanja i upravljanja procesima konsolidacije. Dobijeni uvidi mogu biti od koristi kako akademskoj zajednici, tako i donosiocima poslovnih odluka u finansijskim institucijama, u cilju unapređenja efikasnosti i stabilnosti bankarskog sistema. U tom smislu, ovaj rad predstavlja značajan doprinos savremenoj ekonomskoj i menadžerskoj literaturi i otvara prostor za dalja istraživanja u oblasti bankarskih integracija i strateškog upravljanja finansijskim institucijama. Pitanja međunarodnog krivičnog prava, zaštite osnovnih ljudskih prava i odgovornosti za najteže oblike međunarodnih zločina predstavljaju jednu od najvažnijih i najosetljivijih oblasti savremene pravne nauke. U tom okviru, genocid zauzima centralno mesto kao zločin koji prevazilazi granice nacionalnih pravnih sistema i nameće obaveze međunarodnoj zajednici u celini, kako u pogledu njegove prevencije, tako i u pogledu sankcionisanja i razumevanja njegovih dugoročnih posledica.

Šesti rad „Genocid – međunarodna pravna analiza i ekonomske posledice“ autora Miroslava Markovića bavi se sveobuhvatnim sagledavanjem genocida kao međunarodnog krivičnog dela par excellence, uz analizu njegovih normativnih, teorijskih i socio-ekonomskih aspekata. Poseban doprinos rada ogleda se u povezivanju klasične pravne analize, zasnovane na Konvenciji o sprečavanju i kažnjavanju zločina genocida, sa savremenim teorijskim pristupima koji uključuju doprinose Rafaela Lemkina i modele faznog razvoja genocida. Značaj rada dodatno se ogleda u njegovom interdisciplinarnom pristupu, koji prevazilazi okvire isključivo pravne analize i uključuje razmatranje ekonomskih posledica genocida, čime se otvara prostor za šire razumevanje dugoročnih efekata ovakvih zločina na društva i države. Na taj način rad doprinosi boljem razumevanju ne samo pravne prirode genocida, već i njegovih dubokih društveno-ekonomskih implikacija. Uredništvo ocenjuje da ovaj rad predstavlja značajan doprinos savremenoj međunarodno-pravnoj i interdisciplinarnoj literaturi, naročito u kontekstu jačanja svesti o značaju prevencije i sankcionisanja genocida kao jednog od najtežih oblika kršenja međunarodnog prava i osnovnih ljudskih prava. Rad je od posebnog značaja za akademsku zajednicu, istraživače u oblasti međunarodnog prava, kao i za širu stručnu javnost koja se bavi pitanjima međunarodne pravde, ljudskih prava i ekonomskih posledica oružanih sukoba i masovnih zločina.

U savremenim uslovima poslovanja, korporativne komunikacije predstavljaju jednu od ključnih funkcija organizacionog upravljanja, sa neposrednim uticajem na izgradnju identiteta, reputacije i odnosa sa različitim interesnim grupama. Njihov značaj dodatno raste u okruženju koje karakterišu ubrzana digitalna transformacija, povećana transparentnost poslovanja i intenzivirana konkurencija na globalnom tržištu, što nameće potrebu za kontinuiranim teorijskim i empirijskim istraživanjem ove oblasti.

Kritički osvrt sedmog rada na monografiju pod naslovom **„Kritički osvrt na monografiju „Korporativne komunikacije”, teorijski okviri, savremeni komunikacioni izazovi praktične implikacije za upravljanje organizacionim komunikacijama”, Milijanke Ratković** autora dr Dejana Dašića, usmerena je na analizu teorijskog doprinosa, strukturalne konzistentnosti i praktične relevantnosti za savremenu organizacionu praksu. Monografija obuhvata širok spektar tematskih celina, uključujući teorijske modele korporativnog komuniciranja, upravljanje internim i eksternim komunikacionim procesima, odnose sa zainteresovanim stranama, kriznu komunikaciju, kao i uticaj digitalnih tehnologija na transformaciju komunikacionih praksi u organizacijama.

Poseban kvalitet ove monografije ogleda se u njegovom interdisciplinarnom pristupu, kojim se povezuju teorijska znanja iz oblasti menadžmenta, komunikologije i organizacionih nauka sa savremenim izazovima poslovne prakse. Time se doprinosi boljem razumevanju uloge korporativnih komunikacija u oblikovanju organizacione strategije i jačanju konkurentske pozicije preduzeća.

Uredništvo ocenjuje da monografija predstavlja značajan doprinos razvoju naučne misli u oblasti korporativnih komunikacija, kao i da ima visoku primenljivost u akademskom obrazovanju i profesionalnoj praksi. Posebno se ističe njena vrednost u kontekstu savremenih komunikacionih izazova, gde se od organizacija očekuje visok nivo prilagodljivosti, transparentnosti i strateškog upravljanja komunikacionim procesima.

Proces globalizacije i ubrzane thenološke transformacije značajno je uticao na savremene sisteme finansijskog izveštavanja, povećavajući zahteve za transparentnošću, uporedivošću i pouzdanošću finansijskih informacija. Finansijsko izveštavanje danas predstavlja ključni instrument korporativnog upravljanja i donošenja ekonomskih odluka, pri čemu njegov razvoj u velikoj meri zavisi od stepena međunarodne harmonizacije računovodstvenih standarda i kvaliteta institucionalnog okruženja. Osmi rad pod naslovom **„Razvoj i savremeni izazovi finansijskog izveštavanja u uslovima globalizacije" autora Gruje Kostadinovića i Marije Ilievske Kostadinović,** analizira evoluciju sistema finansijskog izveštavanja i identifikuje ključne izazove koji proizlaze iz dinamičnih promena u globalnom poslovnom okruženju. Poseban doprinos rada ogleda se u razmatranju uloge međunarodnih standarda finansijskog izveštavanja (IFRS) u unapređenju kvaliteta finansijskih informacija, kao i u sagledavanju uticaja regulatornog okvira, tržišta kapitala i profesionalnih kompetencija na efikasnost njihove primene. Značaj rada dodatno se ogleda u njegovom sveobuhvatnom pristupu koji povezuje tradicionalne aspekte finansijskog izveštavanja sa savremenim izazovima digitalizacije, automatizacije računovodstvenih procesa i sve izraženijeg značaja nefinansijskog i ESG izveštavanja. Na taj način rad doprinosi razumevanju kompleksne transformacije informacionih zahteva savremenih privrednih subjekata i investicionih tržišta. Uredništvo ocenjuje da rad predstavlja značajan doprinos savremenoj računovodstvenoj i finansijskoj literaturi, naročito u kontekstu tekućih procesa harmonizacije i digitalne transformacije. Dobijeni uvidi mogu biti od koristi akademskoj zajednici, regulatornim institucijama i profesionalnoj praksi u oblasti finansijskog izveštavanja. Ovaj rad ovim otvara prostor za dalja istraživanja usmerena ka unapređenju kvaliteta finansijskih informacija i razvoju integrisanih modela izveštavanja u globalnom poslovnom okruženju.

Savremeni finansijski sistem nalazi se u fazi duboke transformacije koju oblikuju ubrzan razvoj digitalnih tehnologija, inovacije u platnim sistemima i redefinisanje uloge centralnih banaka u uslovima rastuće digitalizacije ekonomije. Posebno značajnu dimenziju ovih promena predstavlja razvoj digitalnih valuta centralnih banaka (CBDC), koje postaju jedno od ključnih pitanja savremene monetarne teorije i prakse, sa potencijalno dalekosežnim implikacijama po monetarnu politiku, finansijsku stabilnost i arhitekturu platnih sistema.

Deveti rad pod nazivom **„Digitalni evro i digitalne valute centralnih banaka (CBDC): izazovi za monetarnu politiku, finansijsku stabilnost i budućnost plaćanja" autora Borisa Siljkovića, Andjele Raičković i Enisa Ujkanovića** analizira konceptualne i praktične aspekte razvoja digitalnog evra, kao jednog od najznačajnijih projekata u okviru evropskih monetarnih inicijativa. Poseban značaj rada ogleda se u sagledavanju njegovih potencijalnih efekata na efikasnost platnih sistema, stabilnost bankarskog sektora i sprovođenje monetarne politike, kao i u razmatranju šireg institucionalnog i regulatornog okvira koji prati uvođenje novih oblika digitalnog novca.

Značaj ovog rada dodatno se ogleda u njegovom komparativnom pristupu, koji uključuje analizu implikacija digitalnog evra i za zemlje van evrozone, sa posebnim osvrtom na Srbiju i procese evropskih integracija. Time se doprinosi boljem razumevanju pozicije manjih i otvorenih ekonomija u kontekstu globalnih finansijskih inovacija i promena monetarne infrastrukture.

Uredništvo ocenjuje da rad predstavlja relevantan i savremen doprinos literaturi iz oblasti monetarne ekonomije i finansijskih inovacija, naročito u kontekstu rastuće akademske i regulatorne pažnje posvećene digitalnim valutama centralnih banaka. Dobijeni uvidi mogu biti od koristi kako istraživačima i donosiocima ekonomskih politika, tako i finansijskim institucijama koje se suočavaju sa izazovima digitalne transformacije. Ovaj rad otvara prostor za dalja istraživanja o dugoročnim efektima CBDC-a na stabilnost finansijskog sistema i buduću arhitekturu globalnih monetarnih odnosa.

S uvažavanjem, glavni i odgovorni urednik

Prof. dr Boris Siljković

Ekonomski signali
Volumen 21, Broj 1, 2026

Sadržaj

Ekonomski signali, 2026, 21 (1): 001-020
UDK: 330.55(497-15)"2008/2024"
DOI: 10.5937/ekonsig2601001G

DETERMINANTS OF NOMINAL GROSS DOMESTIC PRODUCT GROWTH IN THE WESTERN BALKAN COUNTRIES: A PANEL ANALYSIS FOR THE PERIOD 2008–2024*

Miloš Golubović[1], Gordan Janković[2]
[1, 2] Innovation Center, University of Niš, Serbia
[1]milos.golubovic19@gmail.com, https://orcid.org/0000-0001-7783-719X
[2]jankovic.gordan90@gmail.com, https://orcid.org/0000-0003-3172-6990

Received: 05.1.2026; Accepted: 25.5.2026.
Original article
Correspodence: milos.golubovic19@gmail.com

Abstract: The paper analyzes the determinants of nominal gross domestic product growth in the Western Balkan countries during the period 2008–2024. The aim of the research is to identify the relative importance of fiscal, real, price-related, and external factors in explaining nominal economic dynamics. The empirical analysis is based on a panel sample comprising Serbia, Montenegro, North Macedonia, Bosnia and Herzegovina, and Albania, using a Pooled OLS model with robust standard errors. The results indicate that the key drivers of nominal growth are the growth of government expenditures, increased economic openness, and real GDP growth, with real growth representing the most stable and statistically significant factor. Inflation and public debt growth did not show a statistically significant impact. The findings suggest that nominal growth in the observed economies is predominantly driven by real economic activity and fiscal expansion, with foreign trade also playing an important role.

Keywords: nominal GDP growth, Western Balkan countries, panel analysis, fiscal policy, government expenditures, real GDP growth, economic openness, public debt, inflation, Pooled OLS model

* The paper is a part of research financed by the Ministry of Science, Technological Development, and Innovation of the Republic of Serbia, agreed in decision no. 451-03-33/2026-03/200371

Introduction

Contemporary macroeconomic analysis increasingly focuses on nominal gross domestic product dynamics, as nominal GDP represents one of the key reference indicators for assessing economic activity, fiscal capacity, and the sustainability of public finances. Unlike real GDP, which measures changes in the volume of production while excluding price effects, nominal GDP reflects the value of production at current prices; therefore, its dynamics simultaneously capture both real growth and price movements. The OECD emphasizes that nominal GDP, as an indicator measured at current prices, is not suitable for intertemporal comparisons in the same way as real GDP, since changes may result from both real growth and price fluctuations. Nevertheless, precisely for this reason, nominal GDP holds particular importance in fiscal analyses, as key public finance indicators, including the public debt-to-GDP ratio, are expressed relative to the nominal size of the economy (OECD, n.d.).

The importance of nominal GDP becomes especially evident within the contemporary concept of public debt sustainability, given that a country's fiscal position is most commonly assessed through relative indicators, particularly the public debt-to-GDP ratio. Escolano (2010) bases the analysis of public debt dynamics precisely on the debt-to-GDP ratio, demonstrating that changes in this ratio are determined by interest costs, nominal GDP growth, and the primary balance. Within this framework, interest costs contribute to an increase in the public debt-to-GDP ratio, while nominal GDP growth works in the opposite direction by reducing the relative debt burden. A similar contemporary approach is developed by Blanchard (2019), who emphasizes that the fiscal burden of public debt depends on the relationship between the interest rate paid by the government and the economic growth rate. If the interest rate is lower than the growth rate, maintaining public debt may be fiscally less burdensome, whereas the opposite situation increases the risk of rising relative indebtedness. Consequently, nominal GDP growth can contribute to reducing the relative debt indicator even when the absolute level of public debt continues to increase.

Such a nature of the debt-to-GDP indicator opens an important analytical issue: improvements in fiscal indicators do not necessarily stem from debt reduction or stronger fiscal discipline but may instead result from faster growth of the nominal base. Under conditions of elevated inflation, increased public spending, or aggregate demand expansion, nominal GDP may grow faster than real economic activity, thereby creating a more favorable picture of the relative fiscal position. Therefore, it is important to distinguish sustainable improvements based on real production growth from nominal improvements arising from price effects or methodological and statistical characteristics of macroeconomic aggregate calculations.

In the literature, this issue is also associated with questions of fiscal transparency and political incentives in public finance management. Milesi-Ferretti demonstrates that fiscal rules, if not accompanied by a sufficient degree of budget transparency, may encourage governments to resort to forms of "creative accounting," namely presenting the fiscal position in a way that formally satisfies fiscal rules but does not necessarily reflect genuine fiscal adjustment. Similarly, von Hagen and Wolff (2006) find empirical evidence that fiscal rules in the European Union encouraged the use of stock-flow adjustments as a means of concealing deficits.

These issues are particularly relevant for the Western Balkan countries, which continue to face weaker institutional capacities, limitations in fiscal governance, and greater macroeconomic vulnerability compared to developed member states of the European Union. Recent analyses of fiscal governance in the region indicate that the Western Balkan countries should strengthen the technical and analytical capacities of fiscal rules, fiscal councils, and medium-term budgetary frameworks. The World Bank also emphasizes the need to enhance fiscal responsibility, public investment management, and public asset management in the region. Therefore, analyzing the determinants of nominal GDP growth in the Western Balkan countries is important not only for understanding economic growth, but also for interpreting fiscal sustainability and the credibility of public finance indicators (WB, 2025).

Based on the above, the main objective of this paper is to examine the determinants of nominal gross domestic product growth in the Western Balkan countries during the period from 2008 to 2024. The research includes Serbia, Montenegro, North Macedonia, Bosnia and Herzegovina, and Albania, while analyzing fiscal, real, price-related, and external factors of nominal economic dynamics. Particular attention is devoted to public debt growth, government expenditure growth, inflation, real GDP growth, and economic openness, in line with the methodological framework of the study and the established panel model.

The contribution of this paper lies in the fact that nominal GDP growth is not observed solely as a technical macroeconomic indicator, but also as a variable with broader fiscal and institutional implications. In this way, the paper seeks to demonstrate the extent to which nominal growth in the Western Balkan countries is driven by real economic expansion, fiscal expansion, inflationary movements, or external trade integration. Such an approach enables a more precise understanding of the relationship between nominal economic dynamics and perceptions of fiscal sustainability in economies positioned between the processes of European integration, the need for fiscal stabilization, and limited institutional capacities.

Literature review

The empirical literature on the determinants of economic growth and its short-term fluctuations has developed through several complementary approaches encompassing neoclassical and endogenous growth theories, as well as contemporary empirical approaches based on panel data. Modern empirical literature on the determinants of economic growth increasingly focuses on integrated macroeconomic models that combine fiscal, monetary, and external factors in explaining differences in economic performance across countries.

Nominal gross domestic product growth is viewed as a function of real expansion and price movements, with particular emphasis often placed on the importance of macroeconomic stability and economic structure. In this context, contemporary Keynesian literature further emphasizes that the short-term dynamics of nominal growth may be significantly conditioned by aggregate demand developments. Paul Krugman (2012) argues that prolonged recessions are not necessarily the result of structural weaknesses in the economy, but rather primarily the consequence of insufficient effective demand, which leads to declines in production, investment, and employment. Under such conditions, changes in aggregate demand are primarily reflected through variations in real output, which represents the main transmission channel of overall economic activity. Accordingly, nominal GDP growth largely stems from real economic expansion, while fiscal expansion acts as a mechanism that indirectly stimulates overall nominal growth through increases in production and employment. N. Gregory Mankiw, David Romer, and David N. Weil (1992) extend the Solow framework by incorporating the accumulation of physical and human capital, demonstrating that differences in production factors and accumulation rates are crucial for explaining cross-country differences in economic growth. Within endogenous growth theory, Philippe Aghion, Ufuk Akcigit, and Peter Howitt (2015) emphasize the role of innovation, competition, and technological progress as central drivers of long-term growth, viewing growth as the result of a continuous process of creative destruction.

In the field of fiscal policy, Olivier Blanchard and Roberto Perotti (2002) empirically identify significant dynamic effects of changes in government spending and taxation on aggregate output, indicating that fiscal shocks represent a relevant source of short-term economic fluctuations. Ethan Ilzetzki, Enrique Mendoza, and Carlos Végh (2012) further demonstrate that the size of fiscal multipliers is not uniform, but rather depends on structural characteristics of the economy, including the degree of openness and the exchange rate regime, with fiscal expansion effects being weaker in highly open economies and developing countries.

Inflation is not regarded in the empirical literature as a linear determinant of economic growth, but rather as a variable with potentially nonlinear effects. Mohsin S. Khan and Abdelhak Senhadji (2001) identify the existence of specific inflation thresholds above which inflation has a statistically significant negative impact on growth, while below those levels the effects may be neutral or mildly positive. Similar findings are confirmed by Peter L. Rousseau and Paul Wachtel (2002), who show that the relationship between inflation and growth depends on the level of financial development and institutional stability of the economy.

Economic openness and trade liberalization represent one of the key channels of long-term economic growth in contemporary literature. Romain Wacziarg and Karen Horn Welch (2003) empirically demonstrate that countries tend to achieve higher rates of economic growth following trade liberalization, particularly in the medium and long term. However, Francisco Rodriguez and Dani Rodrik (2000) argue that the effects of trade openness are not universal, but instead depend on the quality of institutions, macroeconomic stability, and the structural characteristics of the observed economies.

In the literature dealing with the relationship between public debt and economic growth, Carmen Reinhart and Kenneth Rogoff (2010) find a negative correlation between high levels of indebtedness and long-term growth rates, suggesting the existence of potential debt thresholds beyond which economic growth slows down. These findings were later challenged by Thomas Herndon, Michael Ash, and Robert Pollin (2014), who point to methodological problems and the sensitivity of results to data sampling. Further studies, such as those by Ugo Panizza and Andrea F. Presbitero (2014), as well as Balázs Égert (2015), confirm that the relationship between public debt and economic growth is nonlinear and largely depends on endogeneity, the institutional framework, and macroeconomic conditions.

From a methodological perspective, panel econometrics represents the standard approach in the analysis of macroeconomic relationships, as it enables control over unobserved heterogeneity across countries and over time. Jeffrey Wooldridge (2010) emphasizes that panel models significantly improve estimation efficiency compared to standard cross-sectional and time-series approaches, particularly in cases where heterogeneity exists in economic structures and dynamic processes.

Overall, contemporary literature suggests that nominal and real economic growth are the result of a complex interaction of fiscal impulses, inflationary movements, trade openness, and fundamental real factors, while the intensity and direction of these effects depend on the structural characteristics of the economy and the institutional environment.

Sources, Data Evaluation, and Methodological Framework of the Research

The empirical research is based on a balanced panel sample comprising five Western Balkan countries: Serbia, Montenegro, North Macedonia, Bosnia and Herzegovina, and Albania, covering the period from 2008 to 2024. The total number of observations amounts to 85 (5 countries × 17 years), enabling a comparative analysis of both time dynamics and cross-country differences in the determinants of nominal gross domestic product growth.

The primary source of data for most of the macroeconomic variables used in the study was the International Monetary Fund (IMF) – World Economic Outlook Database, accessed through the DataMapper platform. This database provided data on nominal GDP growth, real GDP growth, inflation, public debt, and government expenditures. Data on foreign trade flows, namely imports and exports of goods and services (% of GDP), were obtained from the World Bank – World Development Indicators (WDI) database, which represents a standard source of internationally comparable development indicators. The indicators used include imports of goods and services (% of GDP) and exports of goods and services (% of GDP), on the basis of which the economic openness variable was constructed.

$$\mathbf{Growth}_{i,t} = \frac{X_{i,t} - X_{i,(t-1)}}{X_{i,(t-1)}} \times 100$$

where $X_{i,t}$ represents the value of the observed variable for country i in year t.

The methodological framework of the research is based on a standard linear panel regression model, in which the dependent variable is explained by a set of economic determinants across both the time and cross-country dimensions of the data (Wooldridge, 2010). The dependent variable is nominal GDP growth (NGROWTH_GDP), while the explanatory variables include public debt growth (NGROWRH_PD), government expenditure growth (NGROWTH_GE), growth in economic openness (NROWTH_OPEN), inflation (INFLATION), and real GDP growth (GDP_GROWTH). This framework enables the separation of the effects of fiscal, real, price-related, and external factors on nominal economic growth.

The formal specification of the panel regression model is as follows:

$$NGROWTH\_GDP_{i,t} = \beta_1 + \beta_2 NGROWTH\_PD_{i,t} + \beta_3 NGROWTH\_GE_{i,t} + \beta_4 NGROWTH\_OPE_{i,t} + \beta_5 INF_{i,t} + \beta_6 GDP\_GROWTH_{i,t} + \varepsilon_{i,t}$$

where:
i=1,2…,5 denotes the country;
t=2008,2009..2024 denotes the year;
ε denotes the random error term.

To determine the optimal model specification, the Pooled OLS, Random Effects, and Fixed Effects approaches were tested, along with the application of the Hausman test and the Breusch–Pagan LM test. Following the diagnostic procedures, the pooled OLS model was identified as the most appropriate specification, while standard errors were corrected by clustering at the country level in order to eliminate the effects of serial correlation and increase the robustness of the estimates. In this way, a methodological framework was established that enables a reliable estimation of the short-term determinants of nominal GDP growth in the Western Balkan countries.

Descriptive Data Analysis and Preliminary Evaluation

Before proceeding to the econometric analysis, it is useful to examine the basic characteristics of the dataset in order to identify the main trends of the observed variables, differences between countries, and their movements over time within the Western Balkan region. Descriptive analysis provides an initial insight into the structure of the data and represents an appropriate foundation for interpreting the results obtained in the subsequent stages of the research. The observed sample includes five Western Balkan countries (Serbia, Montenegro, North Macedonia, Bosnia and Herzegovina, and Albania) over the period from 2008 to 2024, while the balanced panel contains a total of 85 observations.

Table 1. Descriptive Statistics of the Overall Sample

Variable	Mean	Median	Std. Dev.	Min	Max
NGROWTH_GDP	5.0360	5.4524	10.197	-15.903	23.913
NGROWTH_PD	8.2449	9.0542	14.286	-13.150	102.03
NGROWTH_GE	5.2980	5.1049	11.644	-19.781	42.398
NGROWTH_OPEN	6.6349	6.4714	16.460	-31.217	49.691
INFLATION	3.3929	2.1000	3.7204	-1.600	14.200
GDP_GROWTH	2.4994	3.0000	3.5359	-15.000	13.000

Source: Author's calculations based on the Gretl statistical software.

The average nominal GDP growth rate during the observed period amounted to 5.04%, with a relatively high standard deviation of 10.20 percentage points, indicating substantial volatility in economic developments across the region. At the same time, the average growth of public debt (8.24%) exceeded the average nominal GDP growth rate, which may suggest a tendency for indebtedness to grow faster than economic activity. The average growth of government expenditures amounted to 5.30%, approximately at the level of average nominal GDP growth, which may indicate the significant role of fiscal policy during the observed period. The economic openness variable recorded an average growth rate of 6.63%, with a standard deviation of 16.46, pointing to pronounced fluctuations in foreign trade flows and the high sensitivity of the region to international economic developments. The average inflation rate amounted to 3.39%, while the minimum and maximum values indicate the presence of both deflationary episodes and periods of strong price pressures. Finally, real GDP growth averaged 2.50%, with a standard deviation of 3.54 percentage points, confirming moderate economic growth in the region, but also the significant impact of crisis and post-crisis developments during the observed period.

Table 2. Average Values of Variables by Country

Country	NGROWTH_GDP	NGROWTH_PD	NGROWTH_GE	NGROWTH_OPEN	INFLATION	GDP_GROWTH
SERB	4.8392	7.0003	5.4703	7.8023	5.8353	2.0824
MNE	5.5138	9.4643	4.8149	6.0840	3.2765	2.6029
NMC	4.5784	9.7916	5.1430	6.8531	3.0824	2.3294
B&H	4.1482	8.7418	4.1851	5.6060	2.1882	2.2471
ALB	6.1006	6.2264	6.8764	6.8290	2.5824	3.2353

Source: Author's calculations based on the Gretl statistical software.

The comparative analysis of average values by country indicates the presence of certain developmental and macroeconomic differences within the Western Balkan region. Albania recorded the highest average nominal GDP growth rate (6.10%), while the lowest was observed in Bosnia and Herzegovina (4.15%). Montenegro (5.51%) and Serbia (4.84%) were above or close to the regional average, whereas North Macedonia recorded more moderate nominal growth (4.58%). At the same time, Albania also achieved the highest average real GDP growth rate (3.24%), suggesting that nominal expansion in that country was largely supported by a real increase in economic activity. On the other hand, Serbia recorded the lowest average real growth in the sample (2.08%), but simultaneously the highest average inflation rate (5.84%), which may indicate that part of the nominal growth was generated by price-related factors.

With regard to public debt, the most pronounced average growth was recorded in North Macedonia (9.79%) and Montenegro (9.46%), while Albania registered the lowest average public debt growth rate (6.23%). These findings may point to different models of fiscal financing and varying degrees of reliance on borrowing among the observed economies. Concerning government expenditures, Albania achieved the highest average growth rate (6.88%), whereas Bosnia and Herzegovina recorded the lowest value (4.19%). This may indicate a more active fiscal approach in Albania compared to the other countries in the region. The economic openness variable shows that Serbia recorded the highest average growth in openness (7.80%), which may be associated with stronger trade integration and a larger volume of external trade. The lowest average value was registered in Bosnia and Herzegovina (5.61%).

Overall, the results indicate that different patterns of economic growth exist within the region. While in some countries nominal growth relies more heavily on real expansion and trade dynamics, in others inflationary developments or fiscal expansion may play a greater role. These differences further justify the application of panel methodology in the continuation of the research. Based on these findings, the following chapter presents a formal econometric estimation of the determinants of nominal GDP growth using the Pooled OLS, Random Effects, and Fixed Effects models.

Research Process and Analysis of Results

The empirical research was conducted through several consecutive stages in order to ensure methodological reliability and the proper interpretation of the determinants of nominal gross domestic product growth in the Western Balkan countries. The analysis included the estimation of multiple panel specifications, the selection of the optimal model, the implementation of diagnostic tests, and the final estimation of a robust model.

In the first stage, the Pooled OLS, Random Effects (REM), and Fixed Effects (FEM) models were estimated with the aim of comparing the stability of the coefficients and identifying potential individual effects among the observed countries.

The results presented in Table 3 show a high degree of consistency in the estimates across all three models. The coefficients exhibit almost identical values, which represents a first indication that there are no pronounced country-specific effects that would require more complex panel approaches.

The most stable and statistically significant result relates to the government expenditure growth variable (NGROWTH_GE). In all estimated models, this variable has a positive and statistically significant coefficient of approximately 0.51. This implies that a 1% increase in government expenditures is associated, on average, with a 0.51 percentage point increase in nominal GDP growth, ceteris paribus. This finding highlights the strong short-term importance of fis-

Table 3. Results of the Pooled OLS, Rnd. Effects, and Fixed Effects Models

Variable	Pooled OLS	Random effects	Fixed effects
const	-1.05451	-1.05533	-1.05780
	(0.1371)	(0.7026)	(0.8137)
NGROWTH_PD	0.0159150	0.0145172	0.0093622
	(0.6754)	(0.7026)	(0.8137)
NGROWTH_GE	0.512324	0.512324	0.514084
	(0.000)	(0.000)	(0.000)
NGROWTH_OPEN	0.196326	0.196326	0.197958
	(0.000)	(0.000)	(0.000)
INFLATION	0.109450	0.109450	0.124977
	(0.3696)	(0.3696)	(0.3278)
GDP_GROWTH	0.633526	0.633526	0.622379
	(0.000)	(0.000)	(0.000)

Source: Author's calculations based on the Gretl statistical software.

cal policy in the observed economies, indicating that increases in public spending represent an important channel for stimulating nominal economic activity. This result is consistent with the empirical findings of Blanchard and Perotti (2002), who show that fiscal shocks, particularly through government spending, have a significant positive effect on aggregate output.

Another statistically significant determinant of nominal growth is economic openness growth (NGROWTH_OPEN), with a coefficient of approximately 0.20 across all models. This confirms that increased trade flows, and thus stronger integration into international goods and services markets, positively affect nominal GDP growth. This result is expected for small and open economies such as those of the Western Balkans, which are highly dependent on exports, imports, and international trade flows. The finding is consistent with Wacziarg and Welch (2003), who empirically confirm that trade liberalization and greater economic openness contribute to higher economic growth rates.

The third statistically significant factor is real GDP growth (GDP_GROWTH), with a coefficient of around 0.63. This result confirms that nominal GDP growth is primarily driven by real increases in production and economic activity, rather than purely by price effects. This finding is particularly important, as it shows that nominal growth in the observed countries is not predominantly the result of inflationary pressures, but rather of real economic expansion. This is consistent with theoretical and empirical approaches in the literature that view nominal growth as a function of real expansion and price dynamics, with the results indicating that the real component of growth dominates in the observed sample.

On the other hand, inflation (INFLATION) did not show a statistically significant effect in any of the estimated model specifications. Although the coefficient is positive, the p-values do not confirm statistical significance. This implies that, after controlling for fiscal, real, and external factors, inflation is not an independent driver of nominal GDP growth in the analyzed sample. This result is consistent with the findings of Mohsin Khan and Abdelhak Senhadji (2001), who argue that inflation does not have a linear and universal effect on economic growth, but rather depends on its level and the macroeconomic environment.

Similarly, public debt growth (NGROWTH_PD) also did not show a statistically significant effect. The estimated coefficients are low and statistically insignificant, suggesting that increases in nominal public debt are not automatically associated with higher nominal GDP growth. In other words, borrowing in itself did not guarantee stronger economic performance in the observed countries. This finding is consistent with contemporary studies such as those by Panizza and Presbitero (2014), which show that the relationship between public debt and economic growth is neither robust nor straightforward, but largely depends on endogeneity and institutional factors.

Table 4. Selection of the Appropriate Model

Test	Null hypothesis	Statistic test	p-value	Decision	Concuslion
Breusch-Pagan LM	Variance of the individual effect = 0	$\chi^2(1) = 1.67835$	0.195143	Fail to reject H_0	There is no basis for Random effects
F test	All intercepts are equal	$F(4,75) = 0.243052$	0.913002	Fail to reject H_0	There is no basis for Fixed effects

Source: Author's calculations based on the Gretl statistical software.

After estimating the basic model specifications, tests for selecting the appropriate panel model were conducted (Table 4). The Breusch–Pagan LM test examines the validity of the Random Effects approach compared to the Pooled OLS model. The obtained p-value of 0.195143 indicates that the null hypothesis is not rejected, meaning that there is no statistically significant variance of the individual effect across countries. Therefore, the need for a Random Effects model is not supported.

In addition, the F-test for common intercepts yielded a p-value of 0.913002, indicating that the null hypothesis of equal intercepts across countries cannot be rejected. This also suggests that there is no justification for applying a Fixed Effects model.

Based on both tests, it can be concluded that there are no sufficiently pronounced country-specific differences in the observed sample to justify the inclusion of individual panel effects. Consequently, the Pooled OLS model was selected as the most appropriate specification.

Table 5. Diagnostic Tests

Field of validation	**Test**	**Statistic**	**p-value**	**Concuslion**
Autoco-rrelation	Wooldridge	t(4) = -3.51438	0.0245745	Prisustvo autokorelacije
Homoske-dasticity	Wald	$\chi^2 = 0.267318$	0.998213	No Homoskedasticity
Multicolli-nearity	Variance Inflation Factors (max VIF)	max(VIF) = 2.608	/	No Multicollinearity

Source: Author's calculations based on the Gretl statistical software.

The Wooldridge test for autocorrelation yielded a p-value of 0.0245745, indicating the presence of autocorrelation in the model. For this reason, robust standard errors clustered at the country level were applied in the subsequent analysis. The Wald test for heteroskedasticity produced a p-value of 0.998213, leading to the conclusion that there is no heteroskedasticity problem in the model. The multicollinearity test, measured by a maximum VIF value of 2.608, indicates that there is no issue of strong intercorrelation among the explanatory variables.

Due to the detected autocorrelation, the final estimation was performed using the Pooled OLS model with robust standard errors clustered at the country level (Table 6). After correcting the standard errors, the core results remained unchanged.

Table 6. Pooled OLS with Robust Standard Errors

Variable	**Pooled OLS**
const	-1.05451
	(0.1240)
NGROWTH_PD	0.0159150
	(0.6991)
NGROWTH_GE	0.512324
	(0.000)
NGROWTH_OPEN	0.196326
	(0.005)
INFLATION	0.109450
	(0.3599)
GDP_GROWTH	0.633526
	(0.008)

Source: Author's calculations based on the Gretl statistical software.

The following variables remain statistically significant:

- government expenditure growth,
- economic openness growth,
- real GDP growth.

On the other hand, inflation and public debt growth remain statistically insignificant.

This confirms the high robustness of the main findings and further strengthens the conclusion that the main short-term drivers of nominal GDP growth in the Western Balkan countries are:

- fiscal expansion,
- external trade integration,
- real economic growth.

Conclusion

The paper analyzes the determinants of nominal gross domestic product growth in the Western Balkan countries over the period from 2008 to 2024 using panel methodology. The empirical results indicate a high degree of robustness and consistency across different model specifications, with the Pooled OLS model, estimated with robust standard errors, identified as the most appropriate for the observed sample.

The results clearly show that nominal GDP growth in the Western Balkan countries is not driven by a single factor, but rather by the combined effects of fiscal, real, and external determinants. In this framework, the most significant impact is found for government expenditure growth, which emerges as a stable and statistically significant driver of nominal economic activity. This finding confirms the importance of fiscal policy in the short run, particularly in small and open economies where public spending represents an important instrument for stabilizing and stimulating economic activity. In addition to the fiscal component, economic openness also has a significant impact, confirming that integration into international goods and services flows represents an important transmission channel of economic growth. This result further highlights the structural dependence of Western Balkan economies on foreign trade and the international environment.

A key finding of the study also relates to the role of real GDP growth, which proves to be a statistically significant and stable determinant of nominal growth across all estimated models. The results indicate that nominal growth in the observed countries is largely driven by real increases in production and economic activity rather than solely by price movements. Although fiscal factors, particularly government expenditure growth, have a dominant short-term effect, real growth represents the key transmission channel through which overall economic activity is reflected in nominal GDP. This finding is consistent with theoretical approaches that view nominal growth as a function of real expansion and inflation, where the relative importance of these components depends on specific economic conditions.

On the other hand, inflation did not show a statistically significant effect, suggesting that price factors, although present, do not represent an independent driver of nominal growth in the analyzed sample. Similarly, public debt growth was not statistically significant, implying that borrowing in itself does not guarantee stronger economic performance, but that its effects depend on how funds are allocated and on the broader macroeconomic environment.

Overall, the findings of this study contribute to the literature by showing that the key short-term drivers of nominal GDP growth in the Western Balkan countries are a combination of fiscal expansion, external trade, and - most importantly - real economic growth. This further emphasizes the importance of policies aimed at supporting production, investment, and employment as a sustainable basis for long-term economic development.

The limitations of the study relate primarily to the sample size and the limited number of variables included in the model, leaving room for future research to incorporate a broader set of macroeconomic and institutional factors, as well as to apply dynamic panel models. Future research could focus on a deeper analysis of the interaction between real growth and inflation, as well as on identifying the long-term effects of fiscal and monetary policy on nominal growth.

Reference

Aghion, P., Akcigit, U., & Howitt, P. (2015). The Schumpeterian Growth Paradigm. Annual Review of Economics.Vol. 7, pp. 557-575. Available at: - https://www.annualreviews.org/content/journals/10.1146/annurev-economics-080614-115412

Blanchard, O., & Perotti, R. (2002). An Empirical Characterization of the Dynamic Effects of Changes in Government Spending and Taxes on Output. The Quarterly Journal of Economics. Vol. 117, No. 4, pp. 1329-1368. Oxford University Press. Available at: https://www.jstor.org/stable/4132480

Blanchard, O. (2019). Public Debt and Low Interest Rates. American Economic Review, Vol.

109, No. 4, pp. 1197–1229.

Égert, B. (2015). Public debt, economic growth and nonlinear effects: Myth or reality? Journal of Macroeconomics.Vol. 43(C), pp. 226-238. Available at: https://ideas.repecorg/a/eee/jmacro/v43y2015icp226-238.html

Escolano, J. (2010). A Practical Guide to Public Debt Dynamics, Fiscal Sustainability, and Cyclical Adjustment of Budgetary Aggregates. International Monetary Fund, Washington, D.C.

Herndon, T., Ash, M., & Pollin, R. (2014). Does high public debt consistently stifle economic growth? A critique of Reinhart and Rogoff.Cambridge Journal of Economics.Vol. 38, Issue 2, pp. 257–279. Available at: https://academic.oup.com/cje/article-abstract/38/2/257/1714018

Ilzetzki, E., Mendoza, E. G., & Végh, C. A. (2012).How big (small?) are fiscal multipliers? Journal of Monetary Economics. Working Paper 16479. NATIONAL BUREAU OF ECONOMIC RESEARCH. Available at: https://www.nber.org/system/files/working_papers/w16479/w16479.pdf

Khan, M. S., & Senhadji, A. S. (2001).Threshold Effects in the Relationship Between Inflation and Growth. A journal of the IMF. Vol. 48, No. 1. IMF Staff Papers. Available at: https://www.imf.org/external/pubs/ft/staffp/2001/01a/khan.htm

Krugman, P. (2012). End This Depression Now! New York: W. W. Norton & Company.

Mankiw, N. G., Romer, D., & Weil, D. N. (1992). A contribution to the empirics of economic growth. Working Paper 3541. NATIONAL BUREAU OF ECONOMIC RESEARCH. Available at: https://www.nber.org/system/files/working_papers/w3541/w3541.pdf

Milesi-Ferretti, G. M. (2000). Good, Bad or Ugly? On the Effects of Fiscal Rules with Creative Accounting. IMF Working Paper, International Monetary Fund, Washington, D.C.

OECD, Nominal Gross Domestic Product (GDP). Available at: https://www.oecd.org/en/data/indicators/nominal-gross-domestic-product-gdp.html

Panizza, U., & Presbitero, A. F. (2014). Public debt and economic growth: Is there a causal effect? Journal of Macroeconomics. Vol. 41(C), pp. 21-41. Available at: https://ideas.

repec.org/a/eee/jmacro/v41y2014icp21-41.html

Reinhart, C. M., & Rogoff, K. S. (2010). Growth in a Time of Debt. American Economic Review. Vol. 100, No. 2, pp. 573-578. Available at: https://www.aeaweb.org/articles?id=10.1257/aer.100.2.573

Rodriguez, F., & Rodrik, D. (2000). Trade Policy and Economic Growth: A Skeptic's Guide to the Cross-National Evidence. NBER Macroeconomics Annual. Vol. 15. UNIVERSITY OF MARYLAND AND HARVARD UNIVERSIT. Available at: https://www.journals.uchicago.edu/doi/abs/10.1086/654419

Rousseau, P. L., & Wachtel, P. (2002). Inflation thresholds and the finance–growth nexus. Journal of International Money and Finance. Vol 21, Issue 6, pp. 777-793. Available at: https://www.sciencedirect.com/science/article/abs/pii/S0261560602000220

Von Hagen, J., & Wolff, G. B. (2006). What Do Deficits Tell Us About Debt? Empirical Evidence on Creative Accounting with Fiscal Rules in the EU. Journal of Banking & Finance, Vol. 30, No. 12, pp. 3259–3279.

Wacziarg, R., & Welch, K. H. (2003). Trade liberalization and growth: New evidence.Working Paper 10152.World Bank Economic Review. NATIONAL BUREAU OF ECONOMIC RESEARCH. Available at: https://www.nber.org/system/files/working_papers/w10152/w10152.pdf

Wooldridge, J. M. (2010). Econometric analysis of cross section and panel data (2nd ed.). MIT Press. Cambridge, Massachusetts. London, England. Available at: https://ipcid.org/evaluation/apoio/Wooldridge%20-%20Cross-section%20and%20Panel%20Data.pdf

World Bank. (2025). Strengthening Fiscal Governance in the Western Balkans. World Bank Group, Washington, D.C. Available at: https://www.worldbank.org/en/region/eca/brief/strengthening-fiscal-governance-in-the-western-balkans

Ekonomski signali, 2026, 21 (1): 001-020

DETERMINANTE NOMINALNOG RASTA BRUTO DOMAĆEG PROIZVODA U ZEMLJAMA ZAPADNOG BALKANA: PANEL ANALIZA ZA PERIOD 2008–2024.

Rezime: Rad analizira determinante nominalnog rasta bruto domaćeg proizvoda u zemljama Zapadnog Balkana u periodu 2008–2024. godine. Cilj istraživanja je da identifikuje relativni značaj fiskalnih, realnih, cenovnih i eksternih faktora u objašnjenju nominalne ekonomske dinamike. Empirijska analiza zasnovana je na panel uzorku koji obuhvata Srbiju, Crnu Goru, Severnu Makedoniju, Bosnu i Hercegovinu i Albaniju, pri čemu je primenjen Pooled OLS model sa robusnim standardnim greškama. Rezultati pokazuju da su ključni pokretači nominalnog rasta rast državnih rashoda, rast otvorenosti ekonomije i realni rast BDP-a, pri čemu realni rast predstavlja najstabilniji i najznačajniji faktor. Inflacija i rast javnog duga nisu pokazali statistički značajan uticaj. Nalazi ukazuju da nominalni rast u posmatranim ekonomijama dominantno proizlazi iz realne ekonomske aktivnosti i fiskalne ekspanzije, uz značajnu ulogu spoljne trgovine.

Ključne reči: nominalni rast BDP-a, zemlje Zapadnog Balkana, panel analiza, fiskalna politika, državni rashodi, realni rast BDP-a, otvorenost ekonomije, javni dug, inflacija, Pooled OLS model

Ekonomski signali, 2026, 21 (1): 021-034
UDK: 519.22:005.591.6
005.336.1
DOI: 10.5937/ekonsig2601021M

THE IMPACT OF BPR ON INCREASING THE EFFECTS OF AD VALOREM TAXES AND THE ROLE OF THE BUSINESS PLAN IN MAINTAINING MONOPOLY EQUILIBRIUM AND MARKET POWER

Mehmet Meta[1], Nedeljka Dedović[2]

[1] University of Novi Pazar, Department of Economic Sciences, Serbia
[2] Academy of Applied Studies Kosovo and Metohija Department of Peć-Leposavić, Serbia

[1] m.meta@uninp.edu.rs, https://orcid.org/0000-0001-7556-3105
[2] nedeljka.dedovic@akademijakm.edu.rs, https://orcid.org/0000-0002-2755-5976

Received: 18.1.2026; Accepted: 30.5.2026.
Rewiev Article
Correspodence: m.meta@uninp.edu.rs

Abstract: Business Process Reengineering (BPR) in monopolistic enterprises aims to increase efficiency and reduce costs by integrating processes in order to achieve optimal performance. The business plan in monopolistic companies relies, among other things, on cost optimization and price control in competitive conditions. Monopoly and perfect competition represent two extreme market structures. A perfectly competitive market is characterized by the presence of numerous firms producing a homogeneous product, with no barriers to entry for new firms into the industry. In a monopolistic market, there is only one producer offering a differentiated product with no close substitutes, and where barriers to entry are very high. Like firms in other market structures, a monopolistic firm seeks to maximize its total profit. The position of maximum profit is achieved at the level of output where marginal costs equal marginal revenue. This corresponds to a level at which price is higher than marginal cost, which is the source of its monopoly power. Economic theory has devoted considerable attention to the study of monopoly power and measures for its mitigation.

The subject of this paper is the specific impact of BPR on increasing the effects of ad valorem taxation as one of the forms of regulating monopolistic firm behaviour, as well as the effects of its implementation, which ultimately result in equilibrium in the monopolistic market.

Keywords: Business Process Reengineering (BPR), Business plan, ad valorem tax, equilibrium quantity, equilibrium price, monopolistic enterprise, profit, consumer surplus

Introduction

Business Process Reengineering (BPR) significantly impacts the behavior of a monopoly enterprise in the broadest context. Through the implementation of a Business Plan, a monopoly enterprise forecasts high and stable revenues via financial projections. How, then, should the behavior of a monopoly be understood under the conditions of introducing an ad valorem tax? In addition to certain standard assumptions upon which the understanding of monopoly behavior is based [Mihajlović et al., 2017], assessing the effects of introducing an ad valorem tax on equilibrium parameters and the position of the monopolist, the consumer, and the state also includes the following starting points:

- The monopolist faces a downward-sloping linear demand curve;
- The cost structure consists of fixed costs of an absolutely fixed nature and variable costs of a proportional nature;
- The monopoly enterprise seeks to achieve the highest possible profit.

Mutual interactions between the monopolist and buyers are manifested through the demand curve. The monopolist can increase or decrease the volume of production, but this inevitably leads to a decrease or increase in price. By increasing the volume of production, the monopolist's total revenue will increase, remain at the same level, or decrease, depending on the elasticity of demand. In the zone of elastic demand, increasing the volume of production causes total revenue to rise; in the zone of unit elastic demand, it reaches its maximum; while in the zone of inelastic demand, it declines. Viewed from the perspective of marginal revenue as a value indicating the change in total revenue caused by a one-unit increase in production and sales the conclusions are straightforward. In the zone of elastic demand, marginal revenue is positive, indicating that an increase in production leads to an increase in total revenue, while a decrease in production leads to a decrease in total revenue. In the zone of inelastic demand, marginal revenue is negative; thus, an increase in production volume reduces total revenue, while a decrease in volume increases total revenue. Since we have assumed that the total cost structure consists only of absolutely fixed costs and variable costs of a proportional nature, total costs will increase as production rises due to the growth of their variable component. The change in total costs caused by a one-unit change in production volume represents marginal costs, which remain constant across all levels of production.

An assumption that most economists do not call into question [Galbraith, 1970] is the monopolist's drive to achieve maximum profit within the context of given constraints. The monopolist achieves maximum profit by selling their products at a price corresponding to the volume of production and sales where their marginal costs are equal to marginal revenue [Samuelson & Nordhaus, 2000]. In contrast to the monopolist, a competitive firm achieves maximum profit at a volume where the price equals marginal costs. Since marginal costs are always positive, and marginal revenue is negative in the zone of inelastic demand, the position of maximum profit can only be found within the zone of elastic demand [Varian, 2003]. Given that monopoly enterprises possess market power, state authorities aim to weaken it through the application of regulatory measures. In the presence of traditional constraints, digital transformation requires a radical restructuring of business processes in order to overcome these traditional constraints and enable agility in responding to changes in market structures [Grover, 2020]. This agility is often a prerequisite for maintaining competitiveness in markets where, as [Stiglitz, 2019] argues, market power tends to become increasingly concentrated.

Unregulated market and monopoly equilibrium

To determine the volume of production and the price at which the monopolist achieves the maximum profit, it is necessary to know the total profit function. Total profit (TPF) is obtained by subtracting total costs (TC) from total revenue (TR). Given an inverse demand curve of the following form:

$$p = a - bx \tag{1}$$

and the monopolist's total costs:

$$TC = TPF + xc$$

total profit can be represented by the following function:

$$TPF = (a - bx)x - (TPF + xc)$$

where a denotes the intercept of the linear demand curve on the vertical axis (ordinate), b represents its slope, x is the level of production, TFC stands for total fixed costs, c represents variable costs per unit (i.e., marginal costs), and p is the price. By setting the derivative of the total profit function with respect to the argument x equal to zero, we obtain:

$$\frac{dTPF}{dx} = (a - 2bx) - c = 0$$

that is:

$$(a - 2bx) = c$$

in which the left side represents marginal revenue, and the right side represents marginal costs. By solving it for x, we obtain the level of production at which the monopolist achieves the maximum total profit (x^*):

$$x^* = \frac{a}{2b} - \frac{c}{2b} \qquad (2)$$

The equilibriun price (p^*) sis obtained by substituting x^* into equation (1) and is given by:

$$p^* = \frac{a}{2} + \frac{c}{2} \qquad (3)$$

Any change in the volume of production causes a change in both total revenue and total costs. By increasing the volume of production by one unit, total costs rise by the amount of the marginal costs. Simultaneously, marginal costs represent the increase in total variable costs caused by a one-unit increase in production, as our model assumes that fixed costs are of an absolutely fixed nature. Within the economically relevant range of total revenue specifically, the zone of elastic demand a one-unit increase in production increases total revenue, and vice versa. The value indicating the extent to which revenue will increase given a one-unit increase in production volume is called marginal revenue. As long as an increase in production results in a greater rise in total revenue relative to costs, it is rational to increase production; conversely, it is justified to reduce production if that reduction causes a greater decrease in costs compared to the decrease in total revenue. Marginal costs may be higher or lower, but they must be positive. This fact indicates that the equilibrium volume and equilibrium price must be located within the section of the demand curve where it is elastic that is, where marginal revenue is positive. In the zone of unit elastic demand, the equilibrium volume can only be found if marginal costs are zero. Given a specific demand curve and marginal costs, the monopolist will have no incentive to produce a quantity smaller or larger than the one determined by the point x^* ; however, this does not imply that he would not do so if compelled. If state authorities mandate a price lower than the equilibrium price, the monopolist, guided by his own interests, will increase production.

With this increase, his total profit will be lower than what would be achieved in an unregulated market, but it would certainly be the highest possible under the new circumstances. In order to weaken the monopoly power of the enterprise, the state may also introduce a sales tax on the product. Regardless of the type of tax mandated by state authorities, the monopolist will react by reducing production and increasing the price. Even under these new circumstances, he will behave rationally, as he seeks to maximize his welfare within the context of given constraints, measured by the magnitude of his surplus and the level of his total profit.

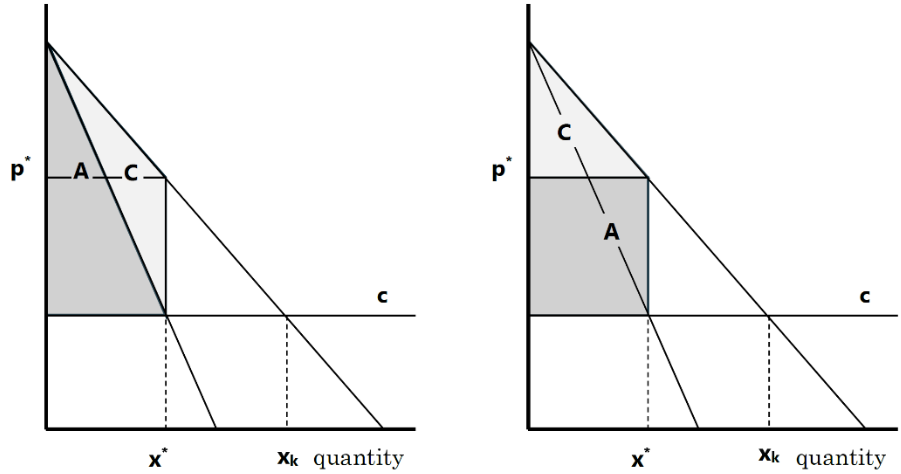


Figure 1: Equilibrium Output of a Monopoly Enterprise

The signigicance of the inverse demand and supply curve

Buyers purchase a product only if the magnitude of satisfaction they derive from owning it is greater than the amount of sacrifice they endure. If we express the satisfaction consumers gain through the maximum price they are willing to pay, and the sacrifice through the actual price they do pay, the difference between these two values represents the level of their surplus. This approach implies that we treat the demand curve as a reservation price curve, which shows the maximum price buyers are willing to pay to purchase a specific quantity. In the graph, the consumer surplus (CS) at the equilibrium quantity x^* is represented by the area of triangle Cand amounts to [Mankiw, 2005]:

$$CS = \frac{1}{8b}(a-c)^2 \qquad (4)$$

In an identical manner, we can treat the monopolist's supply curve. For a monopoly enterprise, only a price higher than the marginal costs is acceptable. The difference between the market price and the amount of marginal costs represents the magnitude of its surplus.

The monopolist's surplus *(MS)* at the equilibrium level $*$, defined as the difference between the price he receives $(*)$ and his marginal costs, is represented in the graph by the area of triangle A in the left panel, and by the area of quadrilateral A in the right panel. The monopolist's surplus is equal to the sum of his profit and total fixed costs, and at the equilibrium level, it amounts to:

$$MS = \frac{1}{4b}(a - c)^2 \qquad (5)$$

The sum of areas A and C geometrically represents the magnitude of the total surplus that is, the combined surplus of both the consumer and the monopolist. At the equilibrium price ∗ and equilibrium quantity ∗ the total surplus (TS) amounts to:

$$TS = \frac{3}{8b}(a - c)^2$$

We notice that at the equilibrium level, the monopolist's surplus is twice as large as the consumer surplus. Given a specific demand curve, the amounts of consumer surplus, monopolist's surplus, and total surplus depend on the level of marginal costs. If marginal costs are higher, these surpluses are smaller, and vice versa. Can the monopolist's surplus and consumer surplus be increased if the monopoly enterprise's production volume exceeds x^*? This cannot be achieved by selling the entire quantity at a single price, as the monopolist's surplus would decrease while the consumer surplus would increase. However, by applying a different pricing policy for production within the interval ($x^* - x_k$), it is possible to increase the monopolist's surplus without reducing the consumer surplus, increase the consumer surplus without reducing the monopolist's surplus, or even increase the surpluses of both actors simultaneously [Varijan, 2003]. Such a possibility exists because this range of output represents a span where the buyers' maximum willingness to pay exceeds the monopolist's willingness to produce an additional unit. If the monopolist were to sell every unit within this interval at a price equal to marginal costs, he would be no better off, but also no worse off than before, as his surplus would remain unchanged, while the consumer surplus would double. If we imagine another extreme pricing policy namely, selling each additional unit at prices equal to the consumers' reservation prices the monopolist's surplus would increase by half of its amount at volume x^* while the consumer surplus would remain at the same level. In addition to these extreme cases, there is a whole range of other possibilities reflected in a simultaneous increase in both the monopolist's and the consumer's surpluses. These are cases where each additional unit is sold at a price lower than the maximum amount buyers are willing to pay, but higher than the marginal costs. All of this indicates that monopoly represents an inefficient market structure specifically, a Pareto-inefficient market arrangement [Petković & Kostić, 2014]. If production exceeds x_k there is no possibility of improving the economic position of market participants, as for every additional unit, buyers are willing to pay a lower price than the price at which producers are willing to produce it.

The impact of BPR on the market power of a monopolistic enterprise

In a perfectly competitive market, a firm achieves maximum profit at the output level where its marginal costs equal the price, whereas a monopolist maximizes profit at the output level where its marginal costs equal marginal revenue.

A monopolist possesses market power because he can set the price above marginal costs [Komazec, Ristić 2011]. A firm's market power is not determined by its size, but rather by its influence over price. How significant is a firm's market power, and how can it be quantitatively determined? At first glance, it might seem correct to measure a firm's market power by the magnitude of its surplus; however, in most cases, this is incorrect. We consider it far more justified to measure market power using a ratio that indicates the size of the monopolist's surplus for every unit of its total revenue achieved at the equilibrium level. At the equilibrium level, the monopolist's total revenue amounts to:

$$TR = \frac{1}{4b}(a^2 - c^2) \tag{6}$$

and its total variable costs (TVC)

$$TVC = \frac{(ac - c^2)}{2b} \tag{7}$$

The monopolist's surplus at the equilibrium level is given by expression (5), which was obtained by subtracting expression (7) from expression (6). Based on the provided values for TR, MS, and TVC, the index of monopoly power (L) will be:

$$L = \frac{TR - TVC}{TR} = \frac{MS}{TR}$$

which, after substitution and simplification, yields:

$$L = \frac{a - c}{a + c} \tag{8}$$

This index can also be obtained by using the coefficient of the price elasticity of demand, or the price flexibility coefficient as its reciprocal value. In our example, the inverse demand curve takes the form:

$$p = a - bx$$

The value of the price flexibility coefficient ($1/\lfloor E \rfloor$) will be obtained using the following formula:

$$\frac{1}{\lfloor E \rfloor} = \left[\frac{dp \cdot dx}{(p_x)}\right]$$

where $dp \cdot dx$ denotes the derivative of the inverse demand curve with respect to the argument *x*. For the demand curve given by expression (1) the absolute value of the price flexibility coefficient will be:

$$\frac{1}{\lfloor E \rfloor} = \left[\frac{b-bx}{a-bx}\right]$$

In which *x* denotes the production volume at the equilibrium level. By substituting the equilibrium output with expression (2) we obtain the price flexibility coefficient:

$$\frac{1}{\lfloor E \rfloor} = \left[\frac{a-c}{a+c}\right]$$

At the equilibrium output level specifically, at the price given by expression (3) the elasticity is equal to:

$$\lfloor E \rfloor = \frac{a+c}{a-c}$$

The index of monopoly power and the elasticity of demand are inversely related; a higher elasticity coefficient results in lower monopoly power, and vice versa.

$$L = \frac{1}{\lfloor E \rfloor} \tag{9}$$

The index of monopoly power at the equilibrium level is equal to the price flexibility coefficient, which is the reciprocal of the price elasticity of demand coefficient.

Ad valorem taxation

Ad valorem tax is a specific type of indirect tax [Jarić & Šagi, 2002]. Its amount per unit of product depends on the output price and is not constant. If the price is higher, the amount of the ad valorem tax per unit of output is larger, and conversely, if the price is lower, the amount of the ad valorem tax is smaller. Its amount per unit is obtained by applying the prescribed tax rate to the price paid by the buyer [Mankiw, 2006],

$$\text{tax per unit} = p_{\text{kup}} \cdot k$$

where k denotes the tax rate in decimal form and p_{kup} the price paid by the buyer. If we subtract the tax from the price paid by the buyer, we obtain the amount the monopolist receives per unit of product (p_{mon}):

$$p = p_{\text{kup}}(1-k)$$

How an ad valorem tax will affect the equilibrium price, equilibrium quantity, monopolist's surplus, and consumer surplus will be illustrated starting from the inverse demand curve given by expression (1) and the assumption of the monopolist's constant marginal costs. The inverse demand function shows the price buyers are willing to pay if the sales volume of the monopoly firm is x.

When the state imposes an ad valorem tax in the amount of k, the price paid by buyers (p_{kup}) will differ from the price received by the monopoly firm (p_{mon}). At every production level, the price received by the monopolist, compared to the price paid by the buyer, is lower by the amount of the tax and equals:

$$p_{mon} = (a - bx)(1 - k) \qquad (10)$$

Based on the price function given by expression (10), the monopolist's total revenue function is:

$$TR_{mon} = (ax - bx^2)(1 - k) \qquad (11)$$

In determining the equilibrium volume and equilibrium price of the monopoly firm before the introduction of the tax, the following marginal revenue function was used:

$$MR = a - 2bx \qquad (12)$$

With the introduction of the ad valorem tax, the inverse demand curve given by expression (1) is no longer the average revenue curve, and the marginal revenue curve given by relation (12) ceases to be the monopolist's marginal revenue curve. The marginal revenue after the introduction of the tax is obtained by deriving the total revenue function from expression (11) with respect to the argument x. It amounts to:

$$MR_{mon}(a - 2bx)(1 - k) \qquad (13)$$

Expression (13) indicates the change in the total revenue of the monopoly firm if, at a given amount of ad valorem tax (k) its volume of production and sales changes (increases or decreases) by one unit of quantity.

As can be observed from the graphic display below, the curve drawn based on relation (10), compared to the inverse demand curve (1), intersects

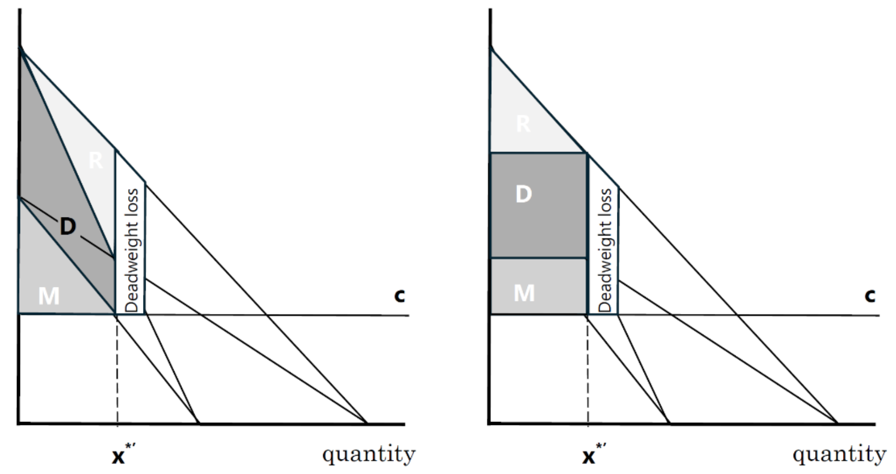


Figure 2: Ad valorem tax and monopoly equilibrium

the vertical axis closer to the origin, has a smaller slope, and intersects the abscissa at the same point as the inverse demand curve. The mon curve has an intercept on the vertical axis at price *a(1-k)*, its slope is *b(1-k)* and it intersects the abscissa at the same point, *a/b*. The MR_{mon} curve must lie below the price function that the monopolist receives after the tax, have the same intercept on the ordinate axis, and have a slope twice as steep, thereby intersecting the horizontal axis at the point *a/2b*.

Equilibrium in a regulated monopoly market

We previously established that at the equilibrium output level, marginal revenue equals the marginal costs of the monopoly firm. In the context of the given constraints, at that level, the total profit of the monopoly firm is maximized.

After the introduction of the tax, the equilibrium production level of the monopoly firm is obtained by solving the relation below for the unknown variable x:

$$(a - 2bx)(1 - k) = c$$

and we obtain:

$$x^{*\prime} = \frac{a}{2b} - \frac{c}{2b(1-k)} \qquad (14)$$

By substituting x^* into the inverse demand function, we obtain the price paid by buyers:

$$p_{kup} = \frac{a}{2} + \frac{c}{2(1-k)} \qquad (15)$$

and by substituting it into expression (10), we obtain the price that the monopolist receives:

$$p_{mon} = \frac{a(1-k)}{2} + \frac{c}{2} \qquad (16)$$

By analyzing expressions (14), (15), and (16), we conclude that taxing a monopoly product will decrease the equilibrium quantity, Δx: increase the price paid by buyers, and decrease the price received by the monopolist. The difference between p_{kup} and p_{mon} represents the amount of tax per unit of output at the equilibrium level:

$$unit\ tax = \frac{a}{2}k + \frac{c}{2}\left(\frac{k}{1-k}\right) \qquad (17)$$

Reflections of ad valorem tax on total welfare

With the introduction of this tax form, the price paid by buyers increases by the amount Δ

$$\Delta P_{kup} = \left(P_{kup} - p^*\right)\left[\frac{a}{2} + \frac{c}{2(1-k)}\right] - \left[\frac{a}{2} + \frac{c}{2}\right]$$

specifically:

$$\Delta P_{kup} = \frac{c}{2}\left(\frac{k}{1-k}\right) \qquad (18)$$

and the price the monopolist receives decreases by Δp_{mon}:

$$\Delta p_{mon} = (p^* - P_{kup})\left[\frac{a}{2} + \frac{c}{2}\right] - \left[\frac{a(1-k)}{2} + \frac{c}{2}\right]$$

that is:

$$\Delta p_{mon} = \frac{a}{2k} \qquad (19)$$

The introduction of an ad valorem tax shifts the equilibrium quantity to the left, specifically decreasing it by the amount Δx:

$$\Delta x = (x^* - x^*)\left[\frac{a}{2b} + \frac{c}{2b}\right] - \left[\frac{a}{2b} + \frac{c}{2b(1-k)}\right]$$

that is:

$$\Delta x = \frac{c}{2b}\left(\frac{k}{1-k}\right) \qquad (20)$$

Total surplus before the tax is introduced [10] consists of consumer surplus and monopoly surplus, while after the tax is introduced, it consists of the surpluses of these actors plus the government's tax revenue. The introduction of the tax reduces consumer welfare due to the increase in the price they pay and the decrease in the equilibrium quantity, while the reduction in monopoly surplus is caused by the decrease in the price they receive and the decrease in the equilibrium quantity. This combined reduction in consumer and monopoly surpluses is greater than the total tax revenue, indicating that the sum of the welfare of all-participants together (including the state) is reduced. The reduction in total surplus is shown on the graph by the area of the deadweight loss quadrilateral. As relation (20) shows, the direct cause of the reduction in total welfare is the fall in the equilibrium volume of production from level x^* to level $x^{*\prime}$. The welfare loss will be greater if the ad valorem tax rate is higher and vice versa; with a lower tax rate, the loss of total welfare is smaller.

Conclusion

Business Process Reengineering (BPR) and the practical application of a Business Plan enable a monopoly firm to produce the output at which the largest possible difference between revenue and costs is achieved. This refers to the quantity of output where its marginal costs equal marginal revenue. At this volume, the monopolist achieves maximum profit or minimum loss. The monopolist's surplus is the difference between total revenue and variable costs. If the surplus is greater than the total fixed costs, the company will realize a profit; otherwise, it will incur a loss and will not be able to fully cover its fixed costs.

In the short run, a position of minimum loss at the equilibrium level is better than the alternative of shutting down the company's production, as the loss will be smaller than the total fixed costs that the company would have to bear upon ceasing production. In other words, the alternative of shutting down production would mean operating with a loss equal to the fixed costs, while a production volume of x^* represents the alternative of a smaller loss. If the total surplus is greater than total fixed costs x^* represents the position of its greatest possible surplus and total profit.

The introduction of an ad valorem tax has direct reflections on the monopolist's equilibrium volume, the price level they receive, the level of their profit and surplus, as well as the price paid by the buyer, the consumer surplus level, the tax amount per unit of output, the total tax revenue accruing to the state, the total surplus amount, and the occurrence of "deadweight loss." The most significant consequence of introducing this tax is that the sum of consumer surplus and the monopolist's surplus (or profit) decreases by a greater extent than the amount of tax the state can collect on this basis. The loss of a portion of the total surplus, namely the occurrence of "deadweight loss," is a direct consequence of the reduction in equilibrium volume caused by the introduction of the ad valorem tax. The introduction of this tax, like the introduction of a specific (per-unit) tax, forces the firm to decrease production volume and increase the price, just as administrative price-setting compels it to increase production and decrease the price. These are profit-oriented reactions of the firm to measures taken by modern states with the aim of regulating monopoly positions and weakening the monopoly power of firms.

References

Avdić A., (2007) Mikroekonomija (Vodič za vježbe), Ekonomski fakultet, Sarajevo.

Abrams R., (2000) The Successful Business Plan: Secrets & Strategies, California USA.

Baban Lj., (1991) Tržište, Školska knjiga, Zagreb.

Besanko D., Dranove D., Shanley M., Schaefer S., (2000) Economics of Strategy, New Jersey USA.

Grover, V. (2020). Digital Transformation and Business Process

Reengineering. Journal of Information Technology, 35(2), 110-125.

Jarić D.& Šagi A., (2002) Mikroekonomska analiza, IKP Evro, Beograd.

Komazec S. & Ristić Ž., (2011) Makroekonomija, EtnoStil, Beograd.

Koutsoyiannis A., (1996) Moderna mikroekonomika, Mate, Zareb.

Mankiw G. (2005) Osnovi Ekonomije, Mate, Zagreb.

Meta M. & Saiti A., (2017) Egzogene cene i specifični porez kao oblici regulacije monopola, Ekonomski izazovi, godina 6, br. 11, str. 1-15.

Mihajlović M., Imamović N.& Dragović N.,(2017) Uloga i značaj antimonopolske politike u savremenim uslovima poslovanja, Oditor, vol.3, br.2, str. 87-99.

Đurić Z., (2018) Reinženjering poslovnih procesa, Beogradska poslovna skola.

Hodžić K., Čejvanović F., Kapić R. & Tatić K., (2009) Teorija tržišta i cijena, Institut za ekonomiku poljoprivrede Beograd i Fakultet za poslovni menadžment Mostar.

Galbraith J.K., (1970) Nova industrijska država, Zagreb.

Milovanović M., (1970) Mikroekonomska analiza, Ekonomski fakultet, Beograd.

Pindyck S. R. & Rubinfeld L.D. (2005) Mikroekonomija, Mate, Zagreb.

Petković M. & Kostić L., (2014) Antimonopolska politika Republike Srbije, Ekonomski vidici

Samuelson A. P. & Nordhaus D. V. (2000) Ekonomija, Mate, Zagreb.

Stiglitz J., (2004) Ekonomija javnog sektora. Ekonomski fakultet, Beograd.

Stiglitz, J. E. (2019). Monopoly, Public Policy and the Market Power. American Economic Review, 109(5).

Varijan R. H., (2003) Mikroekonomija (moderan pristup), Ekonomski fakultet, Beograd.

UTICAJ BPR NA POVEĆANJE EFEKATA AD VALOREM POREZA KAO I ULOGA BIZNIS PLANA U ODRŽAVANJU MONOPOLSKE RAVNOTEŽE I TRŽIŠNE MOĆI

Rezime: Reinženjering poslovnih procesa (BPR) u monopolskim preduzećima ima za cilj povećanje efikasnosti i smanjenje troškova kroz povezivanje procesa radi ostvarivanja optimalnih učinaka. Biznis plan se, u monopolskim preduzećima oslanja, između ostalog, na optimizaciju troškova i kontrolu cena u uslovima konkurencije. Monopol i tržište savršene konkurencije su dva ekstremna tržišna stanja. Savršeno konkurentno tržište karakteriše prisustvo brojnih preduzeća koja proizvode homogeni proizvod i gde nema nikakvih barijera ulaska novih preduzeća u granu. Na monopolskom tržištu postoji samo jedan proizvođač, koji proizvodi diferencirani proizvod koji nema bliskih supstituta i gde su barijere ulaska u granu vrlo visoke. Kao i preduzeća u drugim tržišnim strukturama i monopolsko preduzeće želi da maksimizira svoj ukupan profit. Poziciju najvećeg profita ostvaruje pri obimu proizvodnje na kome se marginalni troškovi izjednačavaju sa marginalnim prihodom. Radi se o obimu pri kome je cena veća od marginalnih troškova, što i predstavlja izvorište njegove monopolske moći. Istraživanju monopolske moći i merama za njeno ublažavanje ekonomska teorija je posvetila dovoljno prostora.

Predmet ovog rada je konkretni uticaj BPR na povećanje efekata ad valorem poreza kao jednog od oblika regulacije monopolskog ponašanja preduzeća i efekata njegove primene, sto kao rezultat ima ravnotežu na monopolskom tržištu.

Ključne reči: Reinženjering poslovnih procesa (BPR), Biznis plan, ad valorem porez, ravnotežna količina, ravnotežna cena, monopolsko preduzeće, profit, višak potrošača

Ekonomski signali, 2026, 21 (1): 035-052
UDK: 336.71:004(497.11)
DOI: 10.5937/ekonsig2601035M

CONTEMPORARY PAYMENT SYSTEMS IN THE REPUBLIC OF SERBIA: TECHNOLOGICAL TRANSFORMATION, CONSUMER SENTIMENTS, AND STRATEGIC PERSPECTIVES

Miloš Milanović[1], Nikola Pavlović[2], Marko Savić[3]
[1] Faculty of Economics, Pristina University, Kosovska Mitrovica
[2,3] Academy of Applied Studies Kosovo and Metohija

[1] milos.milanovic@pr.ac.rs, https://orcid.org/0000-0002-4684-6306)
[2] nikola.pavlovic@akademijakm.edu.rs,https://orcid.org/0000-0001-5466-576X
[3] marko.savic@akademijakm.edu.rs,https://orcid.org/0000-0002-0254-8171

Received: 21.1.2026; Accepted: 21.5.2026.
Review Article
Correspodence: nikpayu@yahoo.com

Abstract: This paper provides a comprehensive evaluation of contemporary payment systems in the Republic of Serbia, examining the intersection between institutional infrastructure upgrades and empirical financial consumer behaviour. Structurally, the analysis highlights recent macro-environmental milestones executed by the National Bank of Serbia, including the deployment of the high-performance DinaCard Switch, advanced EMVCo security protocols, and the continuous growth of the Instant Payment System (IPS). To evaluate market readiness, primary empirical research (N = 30) was conducted to track user adoption frequencies, safety perceptions, and transitional barriers regarding digital instruments. The empirical findings reveal a distinct development paradox: while infrastructure efficiency is exceptionally high, a psychological trust deficit and deeply ingrained cash habits (46.7%) restrict total mobilization. Ultimately, the paper synthesizes these insights to establish a strategic optimization roadmap, advocating for targeted financial literacy frameworks, transparent dispute resolution integration, and regulatory alignment with the Single Euro Payments Area (SEPA) to accelerate cashless integration.

Keywords: Payment Systems, Digital Transformation, Consumer Sentiment, Financial Infrastructure, SEPA Alignment

Introduction

The rapid evolution of financial technology (FinTech) and the institutional drive toward cashless economies have fundamentally re-engineered the structural landscape of contemporary banking. Nationally and globally, modern payment systems no longer serve as mere passive conduits for fund transfers; instead, they operate as critical macroeconomic pillars that directly influence monetary velocity, transactional security, and aggregate economic efficiency. In the Republic of Serbia, this dynamic has manifested through an intensive regulatory and technological modernization process spearheaded by the central bank. However, while institutional infrastructure has rapidly converged with international benchmarks, the ultimate velocity of this digital transition depends heavily on the micro-level behaviour, technical literacy, and trust paradigms of domestic financial consumers (Vukša et al., 2024; Milojević et al., 2026).

In contemporary economic literature, the transition from cash-dominant models to digital payment ecosystems is widely recognized as a complex, non-linear process. Scholars emphasizing infrastructure development argue that central-bank-driven payment networks are vital catalysts for financial inclusion and macro-efficiency. Financial analysis frameworks demonstrate that instant and automated clearing networks significantly lower operational friction for commercial businesses, thereby optimizing liquidity management across the broader economy (Savić et al., 2024). Furthermore, recent global research underscores that the deployment of high-performance payment switches and strict adherence to global security standardizations - such as EMVCo and Strong Customer Authentication (SCA) - are imperative to mitigating systemic fraud within accelerating e-commerce environments (Turner & Zhao, 2025).

Nevertheless, a substantial body of literature highlights that technological availability does not automatically guarantee market adoption. Behavioural economists point out that deeply ingrained cultural habits, consumer scepticism toward digital data privacy, and perceived transaction costs frequently create a distinct "adoption lag" in transitional economies. Recent empirical assessments across Central and Eastern Europe indicate that even when national retail payment infrastructures offer exceptional operational speed and safety, a significant portion of the population remains tightly bound to physical fiat currency due to a psychological trust deficit (Popović & Marković, 2025). This developmental asymmetry underscores the necessity of examining payment architectures not merely as technical frameworks, but as socioeconomic ecosystems driven by user sentiment.

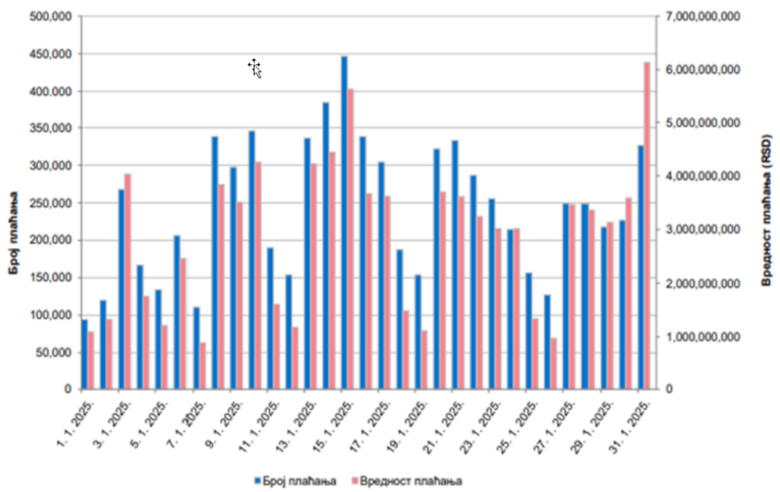
As regional markets strive for greater international economic integration, academic discourse has increasingly focused on the structural impacts of cross-border standardization (Vladisavljević et al., 2023; Kostadinović, Ilievska Kostadinović, 2026). In this context, alignment with the Single Euro Payments Area (SEPA) guidelines is identified as a critical milestone for Western Balkan economies. Recent macroeconomic analyses confirm that SEPA integration radically minimizes cross-border transaction friction and eliminates predatory intermediary fees, serving as a powerful institutional driver for trade acceleration and financial convergence with advanced European markets (European Central Bank [ECB], 2026).

By synthesizing these diverse theoretical and empirical perspectives, this paper establishes a holistic evaluation of the current payment ecosystem in the Republic of Serbia. Moving beyond isolated institutional metrics or purely theoretical concepts, this study explicitly connects the macroeconomic and technical upgrades executed by the National Bank of Serbia with primary, localized empirical research. Ultimately, this approach aims to identify the specific friction points restricting total digital mobilization and to formulate an integrated, data-driven strategic roadmap for future system optimization.

Empirical Assessment of the Serbian Payment Infrastructure

During the January observed period, the Instant Payment System (IPS) maintained by the National Bank of Serbia exhibited uninterrupted 24/7 operational availability over a 31-day cycle. Throughout this duration, the network successfully settled an aggregate volume of 7,538,690 individual transactions, resulting in a total financial turnover of RSD 89.9 billion. This operational load translates into a mean daily transaction frequency of 243,184 transfers and an average daily financial throughput of RSD 2,900.4 million. Furthermore, the data indicates that the average ticket size per transaction was RSD 11,926.9, while the settlement velocity remained highly optimized, requiring an average execution window of merely 1.2 seconds. Ultimately, these performance indicators underscore the significant structural capacity, speed, and real-time processing capabilities of the central bank's clearing infrastructure under high-volume conditions (National Bank of Serbia [NBS], 2025).

Figure 1: IPS Payment System – Daily Turnover Values and Volume of Payments in January 2025.



Source: National Bank of Serbia

Operational Analysis of the RTGS and Clearing Systems

In January 2025, the Real-Time Gross Settlement (RTGS) and Clearing systems operated by the National Bank of Serbia collectively processed 16.2 million transactions over a course of 20 business days. Within this aggregate volume, the Clearing system settled 1.2 million transfers, accounting for 7.4% of the total, whereas the dominant share of 15.0 million payments (92.6%) was executed via the RTGS network. The mean daily transaction volume reached 809,631 payments, with the RTGS and Clearing frameworks averaging 749,496 and 60,134 daily transactions, respectively.

In terms of macroeconomic financial value, the total throughput within the RTGS system reached RSD 20,701.9 billion. Conversely, the Clearing system handled RSD 28.9 billion, representing a minimal share of 0.1% of the total national clearing and settlement turnover. Consequently, the average daily financial turnover stood at RSD 1,035.1 billion for the RTGS system, compared to RSD 1.4 billion recorded within the Clearing framework.

Throughout the 11,100 minutes of total system production allocated to both platforms, no technical disruptions or operational bottlenecks were registered. This uninterrupted performance resulted in a perfect 100% system availability rate, empirically confirming the exceptional reliability, structural integrity, and technical efficiency of Serbia's national payment architecture (National Bank of Serbia [NBS], 2025).

The Interbank Foreign Currency Clearing System and the International Foreign Currency Clearing System operated by the National Bank of Serbia - which collectively encompass a network of 231 participating financial institutions – recorded an aggregate settled transaction value of EUR 107,936,901.06 during the analyzed period. Mirroring the core domestic settlement frameworks, these foreign currency clearing architectures experienced zero operational delays or technical disruptions, successfully maintaining a flawless 100.0% system availability rate (National Bank of Serbia [NBS], 2025).

Table 1: NBS RTGS and Clearing Systems Performance – January 2025.

Датум	Вредност промета у RTGS (А)	Вредност промета у клирингу (Б)	% Б/(А+Б)	Број плаћања у RTGS (Ц)	% Ц/Е	Број плаћања у клирингу (Д)	% Д/Е	Укупан број плаћања (Е)
3. 1. 2025.	952.541,30	1.622,74	0,17%	954.448	94,14%	59.454	5,86%	1.013.902
6. 1. 2025.	895.732,65	1.256,43	0,14%	705.758	93,77%	46.910	6,23%	752.668
8. 1. 2025.	2.760.741,41	1.341,81	0,05%	653.776	91,97%	57.048	8,03%	710.824
9. 1. 2025.	759.854,24	1.313,49	0,17%	653.911	92,43%	53.546	7,57%	707.457
10. 1. 2025.	804.546,67	1.898,12	0,24%	804.018	91,64%	73.378	8,36%	877.396
13. 1. 2025.	786.576,13	1.803,24	0,23%	941.973	91,63%	86.047	8,37%	1.028.020
14. 1. 2025.	692.725,99	1.343,24	0,19%	782.525	92,57%	62.853	7,43%	845.378
15. 1. 2025.	2.878.423,08	1.947,75	0,07%	973.318	92,14%	83.059	7,86%	1.056.377
16. 1. 2025.	714.767,25	1.162,06	0,16%	845.022	94,05%	53.489	5,95%	898.511
17. 1. 2025.	721.214,90	1.336,21	0,18%	701.231	92,34%	58.182	7,66%	759.413
20. 1. 2025.	564.217,93	1.754,95	0,31%	1.064.987	93,09%	79.023	6,91%	1.144.010
21. 1. 2025.	454.152,48	1.131,14	0,25%	910.830	94,46%	53.450	5,54%	964.280
22. 1. 2025.	2.277.877,45	1.030,42	0,05%	588.671	92,31%	49.037	7,69%	637.708
23. 1. 2025.	376.940,31	1.020,67	0,27%	578.650	92,55%	46.583	7,45%	625.233
24. 1. 2025.	436.427,80	1.472,90	0,34%	592.424	91,39%	55.848	8,61%	648.272
27. 1. 2025.	845.159,20	1.662,20	0,20%	805.540	92,33%	66.956	7,67%	872.496
28. 1. 2025.	434.368,67	1.270,35	0,29%	574.194	91,43%	53.849	8,57%	628.043
29. 1. 2025.	2.296.360,09	1.195,96	0,05%	511.089	91,41%	48.014	8,59%	559.103
30. 1. 2025.	506.903,12	1.258,79	0,25%	533.782	91,55%	49.244	8,45%	583.026
31. 1. 2025.	542.362,79	2.130,23	0,39%	813.777	92,42%	66.716	7,58%	880.493
Укупно:	20.701.893,46	28.952,70	0,14%	14.989.924	92,57%	1.202.686	7,43%	16.192.610
Дневно:	1.035.094,67	1.447,63		749.496		60.134		809.631

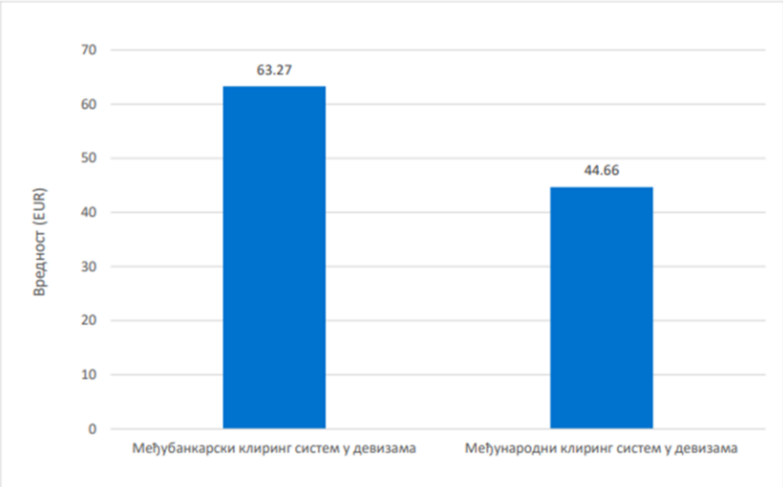
Source: National Bank of Serbia

Performance Indicators of the NBS Interbank and International Foreign Currency Clearing Systems

A detailed breakdown of the metrics from January 2025 reveals that the financial volume settled within the Interbank Foreign Currency Clearing System reached EUR 63.3 million. Concurrently, the International Foreign Currency Clearing System accounted for EUR 44.7 million, bringing the cumulative transactional value across both clearing networks to exactly EUR 108.0 million. In terms of operational scheduling, both foreign currency settlement frameworks conducted their clearing cycles over a standard duration of 20 business days during the observed month (National Bank of Serbia [NBS], 2025).

The National Bank of Serbia has announced the successful deployment of cutting-edge technological innovations across its core clearing and settlement networks, further elevating the parameters of security, interoperability, and macro-operational efficiency within domestic financial transfers.

Figure 2: NBS Interbank and International Foreign Currency Clearing Systems – Transaction Value Ratio in January 2025 (in Millions of Euros)



Source: National Bank of Serbia

In a coordinated effort with commercial banking institutions and relevant financial technology stakeholders, the central bank integrated several critical architectural infrastructure components designed to modernize the national DinaCard platform:

- **The Next-Generation DinaCard Switch:** Built upon a modern, high-performance architecture, this core transaction processing module ensures enhanced infrastructural stability, accelerated processing velocities, and superior system resilience against volatile transaction surges.
- **DinaCard Secure Solution:** Fully aligned with the highest international card security paradigms (EMVCo standards), this framework integrates Strong Customer Authentication (SCA) protocols, thereby substantially optimizing fraud mitigation and merchant-consumer protection within global e-commerce environments.
- **DinaCard Directory Server and Access Control Server (ACS):** These components deploy an advanced user verification model, seamlessly enabling the domestic DinaCard brand to engage with global 3D Secure verification networks.
- **Advanced Dispute Management Solution:** This system reengineers the operational lifecycle of contested transactions, ensuring transparent, highly precise, and rapid communication channels among all participating financial intermediaries during chargeback or dispute resolution procedures (National Bank of Serbia [NBS], 2025).

Comparative Analysis with Developed and Regional Markets

A comparative structural evaluation of contemporary payment architectures across the Republic of Serbia, neighbouring regional economies, and advanced global markets indicates that although Serbia has experienced monumental growth in digital and cashless transaction adoption over recent years, certain metrics remain below the average of leading European nations. Contemporary research into financial payment frameworks suggests that mobile and electronic payment penetration in Serbia is still in a transitional developmental stage relative to specific regional peers and advanced Western markets. This gap is particularly evident when examining the deep daily integration of electronic transaction platforms and mobile commerce channels across Europe and North America (Savić et al., 2024).

Central bank data confirms a powerful, non-linear upward trend in domestic cashless transactions, spearheaded by the continuous year-over-year expansion of the national instant payment infrastructure (IPS NBS). Throughout 2025, tens of millions of instant transactions were recorded, reflecting significant volume and value expansions compared to preceding fiscal periods. This dynamic signals a rapid behavioural shift and widening systemic acceptance of modern financial services within the domestic economy. Such momentum positions Serbia highly favourably within the regional Western Balkan cluster, where the country occupies a leading role in digital transaction infrastructure growth and volume acceleration (National Bank of Serbia [NBS], 2025).

Nevertheless, macro-environmental indicators - such as the volume of active payment cards per capita, the penetration rate of contactless and mobile wallet solutions, and the aggregate share of cashless settlements within total retail turnover - reveal that Serbia still lags behind the highly integrated digital economies of Western Europe, which have successfully embedded digital channels into everyday consumer habits. In a regional context, while Serbia maintains operational parity with immediate neighbouring markets, it possesses immense latent growth potential. Unlocking this capacity depends on deeper structural alignment with international protocols, such as the Single Euro Payments Area (SEPA). Accession to the SEPA network would radically streamline and lower the cost of cross-border Euro transactions, catalysing closer convergence with developed financial markets.

In conclusion, while the Republic of Serbia continues to execute critical technological upgrades and register robust growth metrics in electronic payment channels, a definitive developmental asymmetry persists when benchmarked against leading global financial systems. Expanding payment access points, fostering continuous digital innovation, and systematically adopting international interoperability protocols remain the defining variables that will accelerate Serbia's integration into advanced global payment ecosystems.

Empirical Analysis of Consumer Sentiments and Financial Behaviour

To complement the macro-environmental transaction metrics provided by the central bank, a primary empirical study was conducted via a quantitative survey targeting financial consumers in the Republic of Serbia (N = 30). The primary research objective was to evaluate user adoption rates, safety perceptions, and behavioural transitions regarding modern payment technologies, establishing a direct link between institutional infrastructure upgrades and end-user experiences.

Demographic Profile of the Sample

The demographic baseline indicates a balanced and representative distribution of respondents. In terms of gender, the sample comprises 14 male respondents (47%) and 16 female respondents (53%), minimizing gender-based analytical bias.

The age distribution is predominantly skewed toward the economically active population, which represents the core user segment of modern financial services. Specifieflect the segment with the highest transactional frequency in the domestic economy.

Analysis of Payment System Adoption and Consumer Habits

The empirical data reveals a nuanced landscape regarding the adoption of digital banking channels. When questioned about electronic banking usage, 46.7% of participants answered affirmatively, while 53.3% indicated non-usage. This distribution suggests that while digital transformation within the banking sector has achieved significant penetration, a notable digital divide persists, leaving substantial room for educational and promotional strategies by financial institutions.

Despite this divide, the operational frequency of electronic payments among active users is relatively high, as illustrated in the comprehensive survey matrix below.

Table 2: Empirical Breakdown of Consumer Payment Modalities and Channel Adoption

Survey Question / Variable	Response Options	Frequency (n)	Percentage (%)
Frequency of Electronic Payments	Daily	10	33.3%
	Several times a week	14	46.7%
	Rarely	6	20.0%
Primary Payment Modality	Cash	14	46.7%
	Payment cards	10	33.3%
	Mobile payments	6	20.0%
Contactless Card Adoption	Yes	6	20.0%
	No	24	80.0%
Digital Wallet Usage (e.g., Apple/Google Pay)	Yes	11	37.0%
	No	19	63.0%

Source: Author's own research

The data confirms that traditional payment mechanisms, particularly cash (46.7%), still retain a primary position in everyday retail transactions. However, the combined share of alternative digital channels – payment cards (33.3%) and mobile solutions (20.0%) - collectively accounts for more than half of the sample's preferences (53.3%), indicating an ongoing paradigm shift toward digital payment ecosystems.

A critical friction point is observed in contactless payments, where 80% of respondents reported non-adoption. This lag suggests that deeply ingrained consumer habits, potential deficiencies in targeted financial literacy, or systemic scepticism toward automated card mechanisms continue to slow down the adoption curve. Similarly, the 63% non-adoption rate for digital wallets highlights that mobile-device-integrated payments

Table 3: Consumer Sentiment Regarding Trust, System Efficiency, and Technological Advantages

Sentiment Dimension	Response Options	Frequency (n)	Percentage (%)
Trust in Electronic Payment Security	Full trust	10	33.0%
	Partial trust	15	50.0%
	No trust	5	17.0%
Perception of System Modernity & Efficiency	Modern and efficient	17	57.0%
	Partially modern	9	30.0%
	Outdated	4	13.0%
Core Advantage of Modern Systems	Speed and simplicity	18	60.0%
	Security	7	23.0%
	24/7 Availability	5	17.0%

Source: Author's own research

are still in a transitional phase, constrained by varying degrees of commercial bank support and consumer unfamiliarity with mobile security architectures.

Infrastructure Trust, Modernization Perception, and Future Trends

Consumer sentiment regarding system integrity and innovation serves as a vital indicator of market maturity. The qualitative perceptions of the respondents are structured in the previous table.

The metric on institutional trust demonstrates that while the majority exhibits baseline confidence (83% combined full or partial trust), a dominant 50% remain cautious. This widespread partial scepticism emphasizes the necessity for commercial banks and regulatory bodies to implement robust, continuous consumer education frameworks regarding electronic transaction safety. This is highly relevant given the recent deployment of advanced security architectures like the DinaCard Secure solution and Strong Customer Authentication (SCA) protocols, which aim to bridge this exact trust gap.

On a macroeconomic level, consumer evaluation of the domestic financial infrastructure is heavily positive; 57% of respondents view the payment systems in Serbia as highly modern and efficient, which correlates directly with the high adoption rates of mobile banking applications, utilized by 83% of the sample. Furthermore, the primary driver for digital migration is utilitarian, with 60% of consumers identifying time-efficiency, speed, and operational simplicity as the ultimate benefits of modern financial frameworks. This user sentiment closely aligns with the empirical performance of the NBS IPS network, which boasts an average processing velocity of just 1.2 seconds.

Ultimately, a forward-looking perspective remains strong within the domestic market, with 47% of the total sample explicitly anticipating that physical fiat currency (cash) will eventually be entirely superseded by digital transaction ecosystems in the future, confirming that the structural transition toward a cashless society is psychologically well underway.

Strategic Roadmap for Payment System Optimization: An Integrated Synthesis

The empirical findings extracted from the primary consumer rese-arch, when benchmarked against the macroeconomic performance indicators of the National Bank of Serbia (NBS), reveal a critical developmental paradox within the domestic payment ecosystem. While the central bank's core infrastructure demonstrates world-class technical efficiency - evidenced by the NBS Instant Payment System (IPS) operating at a flawless 100% availability rate with an average transaction velocity of 1.2 seconds - the micro-level consumer data exposes a persistent reliance on traditional cash mechanisms (46.7%) and a pronounced deficit in full institutional trust (50% partial trust).

To bridge this asymmetry and accelerate the transition toward a highly digitalized, cashless national economy, the financial sector must orchestrate a synchronized, multi-stakeholder optimization strategy. Synthesizing consumer behavioural insights with systemic requirements yields four pillars for future development:

1. Architectural Trust Mitigation and Financial Literacy Frameworks

The structural transition from a cash-dominant environment to a digital paradigm cannot be achieved through technological deployment alone; it requires a profound cognitive shift in public risk perception. The widespread partial scepticism among consumers highlights an urgent necessity for the NBS and commercial banking institutions to establish continuous, transparent educational campaigns.

These initiatives should actively decode the cryptographic security layers of recent structural upgrades, specifically emphasizing the backend protective capabilities of the DinaCard Secure solution and global EMVCo compliance. By translating abstract technical milestones into tangible consumer reassurances regarding fraud mitigation and data privacy, institutions can effectively convert cautious observers into confident digital participants.

2. Streamlining Contactless and Mobile Wallet Interoperability

A significant friction point identified in the empirical sample is the high non-adoption rate of contactless payments (80%) and digital wallets (63%), which contrasts sharply with the widespread usage of standard mobile banking applications (83%). This imbalance proves that domestic consumers do not reject digital technology inherently, but are constrained by habit persistence and fragmented merchant-level integration.

To resolve this operational bottleneck, commercial banks must leverage the newly integrated DinaCard Directory Server and Access Control Server (ACS) systems to simplify the user-onboarding lifecycle for digital wallets (e.g., Apple Pay, Google Pay). Simultaneously, expanding the domestic point-of-sale (POS) terminal infrastructure to support seamless QR-code interactions ("IPS skeniraj" and "IPS pokaži") will lower transaction barriers for both merchants and consumers, gradually eroding the structural dominance of physical fiat currency.

3. Restructuring Cost Models and Promoting Advanced Dispute Resolution

The utilitarian drive of the domestic market is highly evident, with 60% of consumers defining "speed and simplicity" as the primary advantage of modern payment networks. However, the high non-adherence rate to electronic banking platforms (53.3%) suggests that the perceived transaction fees, maintenance costs, and procedural complexities still outweigh the digital premium for a large segment of the population.

Financial intermediaries should introduce progressive, low-cost account maintenance models specifically tailored for younger and lower-income demographics. Furthermore, commercial institutions must aggressively market and utilize the newly deployed central bank Dispute Management Solution. By ensuring a highly automated, lightning-fast, and transparent chargeback mechanism for contested retail transfers, banks can drastically reduce consumer anxiety regarding digital transaction failures, creating a more resilient behavioural foundation for cashless systems.

4. Regulatory Harmonization, Fintech Integration, and SEPA Alignment

The long-term evolutionary velocity of Serbia's payment infrastructure relies heavily on systemic integration with mature international financial frameworks. Rather than pursuing unregulated or highly volatile decentralized architectures, regulatory efforts should remain strictly oriented toward institutional fintech modernization and deeper alignment with the Single Euro Payments Area (SEPA) standard.

Fostering agile, collaborative sandboxes between the regulatory authorities, established commercial banks, and emerging fintech developers will catalyse the creation of sophisticated, highly secure open-banking solutions. Ultimately, establishing a unified regulatory framework that reduces bureaucratic barriers and introduces fiscal incentives for digital merchants will not only elevate domestic consumer satisfaction but will also fortify the macro-competitive position of the Republic of Serbia within the regional and European financial markets.

Conclusion

The comprehensive structural and empirical investigation conducted in this paper delivers a definitive evaluation of contemporary payment systems in the Republic of Serbia, mapping the complex intersection between institutional infrastructure modernization and end-user behavioural dynamics. The primary macroeconomic indicator established throughout this research confirms that the financial architecture engineered by the National Bank of Serbia (NBS) operates at an elite technical and operational standard. The deployment of the high-performance DinaCard Switch, the integration of advanced EMVCo cryptographic standards, and the exceptional reliability of the national Instant Payment System (IPS) - characterized by a transaction processing velocity of 1.2 seconds - collectively validate that the domestic retail payment backbone possesses the capacity to sustain a highly integrated digital economy.

However, the core scientific value of this study emerges from the structural paradox identified through the primary empirical research (N = 30). The gathered data demonstrates that despite the absolute technical availability of fast, secure electronic and contactless payment networks, a significant transitional friction persists at the micro-consumer level. Traditional payment modalities, spearheaded by physical fiat currency (cash), still maintain a primary foothold, commanding 46.7% of everyday retail preferences. Furthermore, the stark non-adoption rates for contactless mechanisms (80%) and mobile digital wallets (63%) - juxtaposed against a high general utilization of standard mobile banking applications (83%) - clearly prove that the domestic digital divide is not driven by a structural rejection of modern technology, but rather by deeply ingrained behavioural habits and a pronounced institutional trust deficit, with 50% of financial consumers exhibiting only partial confidence in electronic transaction safety frameworks.

To bridge this developmental asymmetry and accelerate Serbia's transition toward a resilient, cashless economic model, the financial sector must execute a synchronized strategy that treats technological, economic, and behavioural variables as an interconnected matrix. Resolving the prevailing trust deficit requires the launch of collaborative, central-bank-backed educational frameworks that explicitly communicate the concrete protection mechanisms of the DinaCard Secure network and Strong Customer Authentication

(SCA) protocols, thereby translating abstract cryptographic safety into tangible consumer reassurance.

Simultaneously, commercial intermediaries must streamline user-onboarding lifecycles by leveraging the DinaCard Directory Server and Access Control Server (ACS) to optimize digital wallet adoption, while expanding merchant-level QR-code networks through automated IPS skeniraj and IPS pokaži interfaces. This structural adjustment must be reinforced by progressive, low-cost banking service models designed to lower the entry barrier for younger or lower-income cohorts, alongside the aggressive commercial deployment of the newly established Dispute Management Solution to minimize consumer anxiety regarding failed transfers.

Ultimately, these localized operational shifts must be anchored by systematic regulatory alignment with the Single Euro Payments Area (SEPA) framework, which will fundamentally reduce cross-border friction, bypass predatory intermediary fees, and catalyse deeper macro-financial convergence with advanced European economies.

In conclusion, while the structural transition toward an optimized digital payment landscape in the Republic of Serbia is psychologically well underway - as evidenced by the 47% of consumers who explicitly anticipate the eventual obsolescence of cash - the final velocity of this migration depends on moving beyond purely technical updates. By actively synchronizing rigorous regulatory oversight, continuous FinTech innovation, and user-centric behavioural strategies, Serbia can effectively dissolve remaining market frictions, securing a highly competitive, integrated, and modernized financial ecosystem within both regional and global frameworks.

References

European Central Bank. (2026). The structural impacts of SEPA integration on Western Balkan economies and cross-border financial convergence (ECB Occasional Paper Series No. 342). European Central Bank.

Jovanović, S., & Nikolić, M. (2025). Analiza bezbednosnih aspekata elektronskog bankarstva i digitalnih novčanika na tržištu u razvoju [Analysis of security aspects of electronic banking and digital wallets in developing markets]. Bankarstvo i Finansije, 12(3), 215–231.

Kostadinović, G., & Ilievska Kostadinović, M. (2026). The role of financial forensics in the prevention and detection of money laundering. Management horizons, 6(1), 123-137. https://hm.edu.rs/index.php/hm/article/view/60

Madura, J. (2023). Financial markets and institutions (14th ed.). Cengage Learning.

Mishkin, F. S. (2023). The economics of money, banking, and financial markets (14th ed.). Pearson.

Milojević, I., Rajković , A., & Murar, I. (2026). Application of the strategic balance sheet method for developing a scale of relative coefficients. Management horizons, 6(1), 23-36. https://hm.edu.rs/index.php/hm/article/view/54

Narodna banka Srbije. (2024). Godišnji izveštaj o stabilnosti finansijskog sistema za 2023. godinu [Annual report on the stability of the financial system for 2023]. Narodna banka Srbije.

Narodna banka Srbije. (2025). Izveštaj o radu platnih sistema i razvoju bezgotovinskih plaćanja u Republici Srbiji tokom 2024. godine [Report on payment system operations and the development of cashless payments in the Republic of Serbia during 2024]. Narodna banka Srbije.

Popović, M., & Marković, D. (2025). The digital divide in transitional economies: Behavioral patterns and consumer trust frameworks in Central and Eastern European retail banking. Journal of Financial Consumer Behavior, 19(2), 142–159. https://doi.org/10.1016/j.jfcb.2025.101422

Rose, P. S., & Hudgins, S. C. (2022). Bank management and financial services (11th ed.). McGraw-Hill Education.

Savić, M., Pavlović, N., & Milanović, M. (2024). Analiza savremenih sistema plaćanja u Srbiji i zemljama regiona [Analysis of modern payment systems in Serbia and neighboring countries]. Oditor – Journal for Management, Finance and Law, 10(2), 77–94. https://doi.org/10.59864/ Oditor12402MS

Savić, N., Petrović, A., & Đorđević, V. (2024). Macroeconomic impacts of instant payment architectures: Empirical indicators from the Serbian IPS network. Economic Review of Emerging Markets, 31(4), 89–106.

Turner, L., & Zhao, X. (2025). Synchronizing EMVCo standards and strong customer authentication (SCA) protocols: A proactive defense matrix against global e-commerce fraud. International Journal of Cyber Security and FinTech, 8(1), 45–61. https://doi.org/10.1108/IJCSF-2024-0012

Vladisavljević, V., Milenković, N., & Radosavljević, M. (2023). Development of elecrtonic payment systems in countries in transition. Srpska Akademska Misao, 8(1), 107-116. https://www.sam.edu.rs/index.php/sam/article/view/60

Vasić, T. (2024). Socio-ekonomski aspekti prelaska na bezgotovinsko društvo u zemljama Jugoistočne Evrope [Socio-economic aspects of the transition to a cashless society in Southeast European countries]. Ekonomski institut.

Vukša, S., Milojević, I., & Mihajlović, M. (2024). The place and role of fiscal policy in contemporary economies. Srpska Akademska Misao, 9 (1), 7-18. https://www.sam.edu.rs/index.php/sam/article/view/63

SAVREMENI PLATNI SISTEMI U REPUBLICI SRBIJI: TEHNOLOŠKA TRANSFORMACIJA, STAVOVI KORISNIKA I STRATEŠKE PERSPEKTIVE

Rezime: Ovaj rad pruža sveobuhvatnu evaluaciju savremenih platnih sistema u Republici Srbiji, analizirajući povezanost između unapređenja institucionalne infrastrukture i empirijski utvrđenog ponašanja korisnika finansijskih usluga. Analiza ističe najznačajnije nedavne razvojne aktivnosti koje je realizovala Narodna banka Srbije, uključujući implementaciju visokoperformantnog sistema DinaCard Switch, primenu naprednih bezbednosnih EMVCo protokola i kontinuirani rast Sistema za instant plaćanja (IPS). Radi procene spremnosti tržišta za dalju digitalnu transformaciju, sprovedeno je primarno empirijsko istraživanje (N = 30) sa ciljem praćenja učestalosti korišćenja digitalnih platnih instrumenata, percepcije njihove bezbednosti i identifikovanja prepreka u procesu prelaska sa tradicionalnih na savremene načine plaćanja. Rezultati istraživanja ukazuju na postojanje izraženog razvojnog paradoksa: iako je efikasnost platne infrastrukture na veoma visokom nivou, psihološki deficit poverenja korisnika i duboko ukorenjene navike korišćenja gotovine (46,7%) i dalje ograničavaju punu mobilizaciju potencijala digitalnih platnih sistema. Na osnovu dobijenih nalaza, rad formuliše strateški okvir za optimizaciju i dalji razvoj platnog prometa u Srbiji, naglašavajući potrebu za unapređenjem finansijske pismenosti, uspostavljanjem transparentnih mehanizama za rešavanje sporova i regulatornim usklađivanjem sa Jedinstvenim područjem plaćanja u evrima (SEPA), kako bi se ubrzala integracija bezgotovinskih oblika plaćanja i podstakao održivi ekonomski razvoj.

Ključne reči: platni sistemi, digitalna transformacija, stavovi korisnika finansijskih usluga, finansijska infrastruktura, usklađivanje sa SEPA standardima

Ekonomski signali, 2026, 21 (1): 053-080
UDK: 005.346
DOI: 10.5937/ekonsig2601053D

RELATIONSHIPS, INTERACTIONS AND COMMUNICATION IN THE GLOBAL BUSINESS-TO-BUSINESS MARKET: A CONCEPTUAL FRAMEWORK

Željko Dević[1], Branka Spasojević[2], Ivana Đelošević[3]
[1,2,3] Academy of Applied Studies Kosovo and Metohija

[1]zeljko.devic@akademijakm.edu.rs, https://orcid.org/0000-0001-8989-0094
[2]branka.spasojevic@akademijakm.edu.rs, https://orcid.org/0000-0002-0153-1909
[3] ivana.djelosevic@akademijakm.edu.rs, https://orcid.org/0000-0002-0566-9294

Received: 27.1.2026; Accepted: 19.5.2026
Review Article
Correspodence: zeljko.devic@akademijakm.edu.rs

Abstract: The contemporary business-to-business (B2B) environment is gaining increasing prominence within global economic flows, necessitated by its inherently inter-organizational nature, global orientation, extensive dimensionality, and its predominant role within the real and sustainable economic sectors. Despite its significance, the field remains characterized by deficient, dispersed, and incoherent research. This underscores the imperative for a more consistent and comprehensive examination and conceptualization of relationships, interactions, and communication within the global B2B marketplace. The objective of this paper is to identify, synthesize, and formulate the pivotal aspects and elements of modern inter-organizational relations through an appropriate conceptual framework. Such a framework significantly contributes to the establishment of an appropriate platform for the development of effective marketing and diverse competitive strategies and processes in this field. The synergistic inte-gration of relationships, interactions, and communication represents an efficient approach to identifying customer needs, aligning organizational activities with customer satisfaction, and maintaining continuous dialogue and cooperation with both customers and other relevant stakeholders within the broader market environment. For the purposes of this study, particular emphasis is placed on examining the relevance and sustainability of fundamental conceptual models of interorganizational relationships and their communication and interaction dimensions, as well as their effective integration with contemporary research trends in the global B2B environment.

Keywords: global B2B environment, inter-organizational relationships, interactions, communication, conceptual approach

Introduction and Methodology

Fragmented analyses of inter-organizational relationships (IOR) have contributed to a certain marginalization of comprehensive and systemic approaches to this phenomenon within the framework of relationship marketing in the business-to-business (B2B) market. It is noticeable that research in this field has predominantly focused on individual behavioural and value-based aspects of inter-organizational relations - such as trust, customer loyalty, and various business benefits, which are more accurately categorized as relational outcomes. In contrast, the process mechanisms of inter-organizational integration - primarily communication processes and interactions, as well as relationships themselves as their key structural and functional dimension - have remained insufficiently theorized and systematically examined.

Under contemporary conditions of globalization, an intensive diversification of relational structures within the B2B market is occurring, accompanied by the continuous reshaping of organizational roles as key actors in interactive processes. In this context, integrated relational approaches and strategies are gaining increasing significance, as they facilitate the coordinated deployment of resources toward the establishment and intensification of customer relationships (Mlađenović, 2025).

The convergence of relational, interactive, and communicative processes is founded on a common foundational premise - the development of long-term relationships with customers and other stakeholders, underpinned by the establishment of effective communication mechanisms as the basis for their integration. Consequently, the integration of relationships, interactions, and communication provides a functional framework for understanding customer needs, aligning organizational activities with market demands, and fostering continuous dialogue and partnership ties across various levels of inter-organizational constellations within the broader B2B environment (Dašić, 2024).

Bearing in mind the aforementioned, the subject of this study paper is focused on the analysis and conceptualization of relationships, interactions, and communication as integrated dimensions of inter-organizational connectivity(Dašić, et al, 2024). The objective is to highlight their significance in shaping contemporary relational strategies within the global B2B market.

This analytical approach, utilizing qualitative-descriptive, analytical-synthetic, deductive, and comparative methods, intends to explore relevant conceptual frameworks of inter-organizational relationships and its key elements, which coincide with modern trends in business practice in this field of expertise. For the purposes of this research, particular emphasis is placed on analysing the individual adequacy and sustainability of fundamental conceptual principles and models of inter-organizational relationships deriving from doctrinal and relevant schools of the relational paradigm, in correlation with contemporary research frontiers in the global B2B environment. This study accentuates three crucial factors of the inter-organizational concept that have differentiated themselves in global practice: relationships, interactions, and communication, examined through their integrated synthesis and application in the B2B market. Accordingly, a tailored two-phase analytical procedure was conducted: (1) an analysis of the developmental, structural-procedural, and functional aspects of each relational component were performed in accordance with the strategic hierarchy and the reference theoretical framework as a platform for further elaboration and comparative research; (2) a subsequent comparison and synthesis of data with contemporary global and technological trends were performed, based on which general conclusions and recommendations were homogenized and formulated.

The Global Dimension of the Inter-organizational Environment

The relevance of examining the relational concept within the business-to-business (B2B) market is particularly instigated by, and directly linked to, the processes of globalization, technological development, and the increasing complexity of market structures, causing necessity for a comprehensive scholarly approach.

An essential dimension of the B2B market lies in its pronounced international orientation, which serves as a prerequisite for the survival, growth, and profitability of contemporary industrial and other organizations, especially amidst the liberalization of global trade. This trend is further bolstered by the fact that certain categories of industrial products with a lower degree of processing, such as raw materials, auxiliary equipment, and process materials, are more favourable to global market placement than final consumer goods, owing to their relative standardization and uniform functional characteristics. Conversely, sophisticated high-technology products also possess significant potential for international commercialization, often exceeding that of consumer goods, due to long-term cooperative agreements that yield a range of additional price and non-price benefits (Hutt & Speh, 1995).

Therefore, global orientation is widely present in inter-organizational practice, particularly within high-growth sectors characterized by accelerating demand, such as information technology, telecommunications, electronics, digital systems, and energy, as well as in economies offering favourable institutional and investment climates for attracting foreign direct investment. This also applies to the exchange of scarce resources, a process driven by the interdependence of global flows of production goods and services, which are indispensable factors for the functional continuity and development of numerous industrial branches.

However, cooperative relationships manifested through various partnership arrangements and alliances are increasingly becoming the decisive factors for business internationalization and market entry. The benefits of such inter-organizational cooperation are multiple: on one hand, they facilitate smooth market expansion, while on the other, they promote the technological and conceptual evolution of the partner organizations' business practices. This is further evidenced by the fact that within the broader international domain, according to the EPRG framework, the majority of business entities exhibit polycentric, regiocentric, or geocentric orientations, whereas ethnocentric focus is primarily reserved for smaller enterprises. Polycentric organizations are export-oriented toward one or more specific countries, tailoring their export marketing strategies to each individual market. A regiocentric market focus targets specific regional economic group. A geocentric orientation is predicated on the standardization of marketing instruments, supplemented by necessary socio-cultural adaptations (Dević et al., 2014).

Furthermore, as Katsikeas (2006) notes in his study, the global conceptualization of the business-to-business market is significantly advanced by the predominantly internati-nal literature in this field that includes specialized publications such as “Industrial Marketing Management” and the “Journal of Business & Industrial Marketing". These journals are supported by diverse international schools of thought and doctrines, providing researchers with a more comprehensive insight into global relational challenges and offering a spectre of effective solutions for contemporary business practice.

Conceptualization of Inter-organizational Relationships in the Global Business-to-Business Market

The business-to-business market, characterized by an extensive spectrum of heterogeneous and interconnected organizational relationships, is considered the point of origin for the relational perspective in modern marketing. In contrast to consumer markets, which are dominated by discrete transactions, the global B2B environment is defined by long-term interactions, a high degree of actor interdependence, and the significant role of trust and cooperation in value creation. Consequently, the focus of marketing theory and practice has shifted from individual exchanges toward the management of relationships and networks as primary sources of competitive advantage.

In this context, this phenomenon requires an analysis from several complementary perspectives: (1) developmental, tracing the evolution of the relational approach and its theoretical foundations; (2) conceptual, involving the definition of key principles, relationships, and models within the relational paradigm; and (3) structural-procedural, referring to the manners of organization, management, and dynamics of interactions among market participants. Such a multidimensional perspective facilitates a deeper understanding of the complex mechanisms shaping contemporary inter-organizational relations (Dević, 2012, 34-38).

Initial Determinants of the Inter-organizational Relationship Paradigm

The scientific origins of the relational paradigm are most frequently associated with the research conducted by the Scandinavian Industrial Marketing and Purchasing Group (IMP), which commenced in the mid-1970s (Ford, 1980, as cited in Baker, 2003). This group advocated for a network or interaction approach to industrial marketing (a termed used for this filed in the past), starting from the fact that relationships in this market are shaped by numerous interactions encompassing complex flows of goods and services, as well as financial and social exchanges between buyers and suppliers.

The emergence of this new paradigm is interpreted as a response to the need for formulating adequate marketing approaches during the transition from mass production to customized modes of market placement, particularly when the object of exchange is an organizational buyer. In this context, interactions are not necessarily initiated solely by the seller, nor are they constrained by time; rather, they evolve over an extended period through two characteristic phases. The first phase comprises short-term exchange episodes involving goods and services, information, and financial or social content. The second, long-term phase leads to the gradual adaptation and institutionalization of roles and responsibilities (Grönroos, 2000, as cited in Egan, 2004). This two-stage process can be interpreted as a transition from short-term, transaction-oriented activities and bureaucratically structured organizational forms toward more flexible partnerships, alliances, and networks within the business-to-business market (Webster, 1992, as cited in Egan, 2004). Simultaneously, the management of these relationships transcends the boundaries of the marketing function, involving a broader spectrum of organizational actors and interest groups. Furthermore, research indicates that cooperation can develop in domains that do not generate immediate profit, such as research and development, industrial design, and data exchange.

The key contributions of this school of thought lie in its emphasis on the significance of inter-organizational relationships within the B2B market, its recognition of the reciprocal roles of suppliers and buyers in shaping and developing mutual relations, and its interpretation of these connections as networked and innovative configurations that simultaneously influence both market and hierarchical structures.

Formulating the Concept of Inter-organizational Relationships

In recent decades, there has been a growing interest in observing this field, emphasizing the necessity for the conceptual and methodological profiling of inter-organizational relationships. However, despite numerous attempts to formulate a new concept of inter-organizational relationships, its incoherent character remains evident, primarily due to the predominantly segregated observation of individual segments of the relational concept.

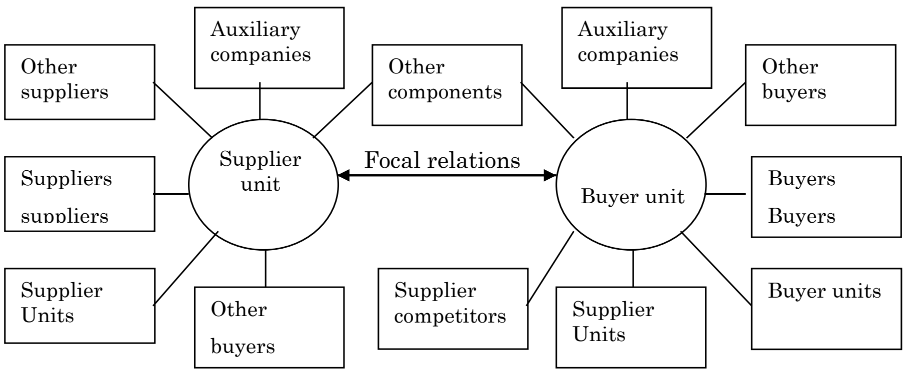
The majority of relevant works in this field place various benefits, distinctive potentials, and outcomes offered by inter-organizational partnerships and collaborations under contemporary market conditions at the epicentre of their research. For instance, Milagres and Burcharth (2022), Browder et al. (2022), Dzhengiz (2020), and Seo and Park (2022) observe partnerships oriented toward the process of inter-organizational learning, which naturally represents a necessary value determinant. Pennec and Raufflet (2018), Holm and Kringelum (2022), Picazo-Vela et al. (2022), and Brzustewicz et al. (2021) deal with models of value creation within partnerships through various forms of knowledge and resource transfer between organizations; Eng et al. (2020), Dhillon (2015), and Zia et al. (2022) highlight, from various perspectives, the role of social capital as a vital construct in forming partnerships that enable individuals and organizations to achieve common goals through effective cooperation and innovative capacities. Furthermore, Tavares et al. (2025) elaborate that, under modern conditions of rapid technological development, intellectual capital emerges as an essential strategic resource through inter-organizational collaboration in processes of adaptation, innovation, and securing sustainable competitive advantage. Finally, Ungureanu et al. (2018) analyse how processes of collective identity formation interact with collaborative practices in inter-organizational partnerships. These works, among others covering diverse segments of this field, affirm the significance of inter-organizational relationships and point to the structures, processes, and support mechanisms for building efficiency in partnerships and creating new business values and results at various organizational levels.

Despite this research progression, certain theoretical and empirical gaps in understanding the relational process within this research domain persist. This is particularly true regarding the consistent identification and conceptualization of input relational, interactive, and communicative factors and parameters for the purposeful generation, formation, and development of inter-organizational, aimed at the continuous creation of functional and sustainable solutions and strategies for new and effective relational processes and ventures.

One of the early and more influential comprehensive conceptualizations of the relational paradigm relevant to B2B marketing was developed by Gummesson and representatives of the Scandinavian School. Seeking to integrate various theoretical approaches, Gummesson (2002) introduced an expanded conceptual framework in which interactions, relationships, and networks constitute three fundamental dimensions of relationship marketing. Within this framework, these forms of connectivity are analytically distinct yet viewed as mutually contingent in the process of building relationships between sellers and buyers. Interactions are interpreted as a continuous series of temporally distributed contacts and activities that gradually constitute relationships, while developed relationships further transform into more stable forms of cooperation, namely, broader and more pronounced marketing relations. These processes do not occur in isolation; rather, they permeate and condition one another, thereby shaping a dynamic relational context. In further elaboration, the author pays particular attention to issues of customer retention, value creation through interactions, the alignment of relationships with organizational structure and management, as well as the typology of various relationship forms.

Parallel to this, there is an intensification of research focused on developing comprehensive approaches to network management, which transcend the boundaries of traditional marketing relations to encompass complex flows of information-technological exchange, financial transactions, and public and interpersonal relations with various stakeholders. Nevertheless, the relationships between customers and suppliers as the primary agents of inter-organizational cooperation remains at the core of this approach. Building upon these premises, Anderson et al. (1994) formulated a dyadic model of network relationships, based on the perspective of a focal organization and its partner, interconnected by complex, multilayered, and dynamic relations.

Figure 1. The Dyadic Network Model of Business Relationships (adapted from Anderson et al., 1994, p. 3)



In the elaboration of the proposed model, the authors particularly emphasize its comprehensive and adaptive dimensions. Beyond the central relations between primary actors, the model encompasses a broader spectrum of relationships with other relevant participants in the economic environment, thereby underscoring its networked nature. The foundational premise is that, under real-world business conditions, simplified, isolated "one-on-one" dyads do not exist; such dyads fail to adequately reflect the complexity and dynamics of interactions, nor can they be analysed independently of the broader market context.

Consequently, relationships are viewed as integral components of a wider, interconnected structure, where fluctuations or transitions within one segment of the network inevitably exert an influence upon its other constituent elements. It is precisely the empirical robustness and the high degree of transferability of this network model that provide a reliable foundation for the creation, development, and management of various forms of complex inter-organizational collaborations within the B2B marketplace (Anderson et al., 1994, 1-15).

Structure and Process of Inter-organizational Relationships

In examining the fundamental foundations of inter-organizational relationships, approaches that focus on the structural-processual elaboration of the network concept across various levels of analysis are of particular importance. These frameworks facilitate a comprehensive understanding of the mechanisms through which organizational relationships are shaped, developed, and sustained within complex market networks. In this context, the structural perspective is oriented toward identifying key elements of the network configuration, such as actors, resources, and activities, as well as analysing their interdependence and positioning within the network. Within this framework, it is essential to provide two fundamental explanations regarding network dimensions and the degree of organizational participation in network structures (Dević, 2012, 37-38).

Firstly, the network approach can be understood as an essentially two-dimensional model: on one hand, it encompasses vertical relationships between producers and distribution channels, i.e. organizational buyers, while on the other, it includes horizontal relationships between partners or competitors.

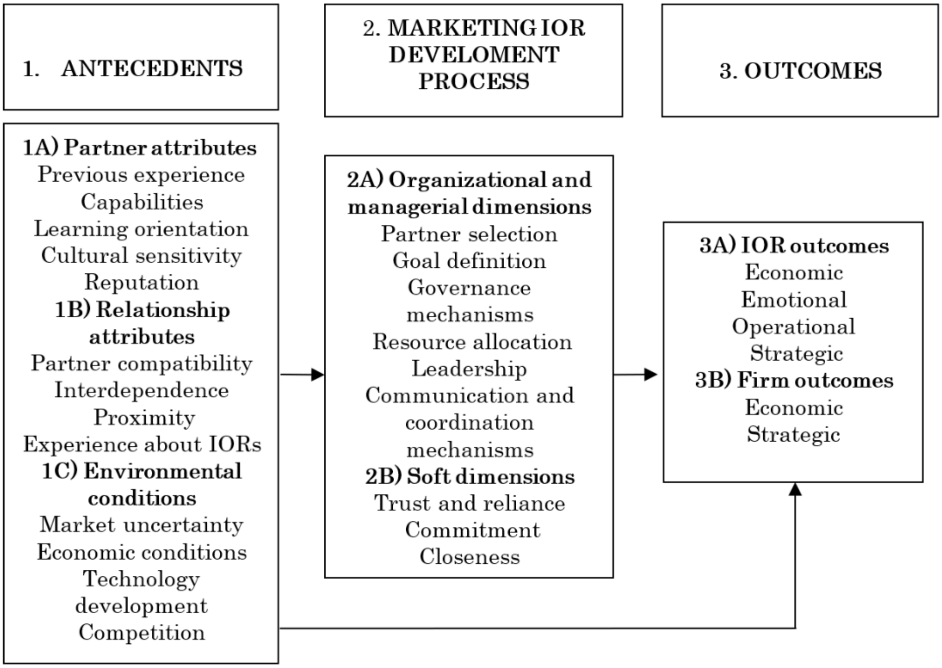
Furthermore, depending on the degree of influence and involvement in network configurations, several distinct forms of integration can be differentiated: (1) cooperative associations, based on the voluntary acceptance of collaborative terms; (2) strategic alliances, characteristic of larger, more complex organizations that enter into contractual agreements to mitigate risks in technological and market development; (3) joint ventures, which involve more tightly controlled partnerships aimed at shared risk and responsibility; (4) strategic alliances, as more advanced forms of network integration that transcend the individual interests of partners and are characterized by significant mutual influence.

Within the network approach, Perks and Easton (2000) analyse various forms of inter-organizational relationships, ranking them from simple transactions to complex strategic alliances, depending on the source, scope, and dimensions of exchange, as well as its value-generating effects. In this regard, the authors propose a tripartite classification: (1) transactional exchange, as the simplest form based on discrete business transactions; (2) relational exchange, characterized by long-term and intensive partnerships; and (3) strategic alliances, aimed at developing close cooperation through the exchange and co-creation of resources, including various forms of alliances and joint ventures.

Heath and Isbell (2017) suggest three key successive models of inter-organizational connections: cooperation (an informal structure based on the principle of reciprocity), coordination (a more formal relationship based on specific agreements), and collaboration (a distinct structural model requiring formalized decision-making on partnerships, responsibilities, and competencies to optimally capitalize on creative ideas and organizational solutions).

Agostini and Nosella (2017) conducted an extensive analysis to develop a framework that systematizes various contributions in the field and identifies new directions for future research. Such a framework provides an opportunity for a multi-perspective and more comprehensive examination and interpretation of the subject matter. Their research framework for inter-organizational relationship (IOR) development, viewed as a multi-phase and multi-dimensional process, comprises: (1) antecedents, (2) process mechanisms, and (3) outcomes.

Figure 2. Organizing Research on Marketing IORs (adapted from Agostini & Nosella, 2017)



(1) The starting point of the research framework consists of antecedents, which encompass three key groups of factors: partner attributes, relationship attributes, and environmental conditions. Partner attributes, such as experience, capabilities, learning orientation, cultural sensitivity, and reputation, define the initial potential for cooperation. Relationship attributes, such as partner compatibility, interdependence, proximity, and prior experience, influence the quality and intensity of future interactions. Moreover, environmental conditions, which comprise market uncertainty, economic conditions, technological advancement, and competition, represent the broader context in which relationships are formed and developed.

(2) Process mechanisms represent the core of the analytical framework, referring to the developmental process of inter-organizational relationships and incorporating both “hard” and “soft” dimensions. Organizational and managerial factors include partner selection, goal definition, governance mechanisms, resource allocation, leadership, as well as communication and coordination mechanisms. In this segment, process mechanisms

- particularly communication and interaction - play a central role in connecting partners and enabling relationship development. In parallel, "soft" dimensions such as trust, reliability, commitment, and closeness form the relational foundation that enables the stabilization and deepening of relationships.

(3) Final outcomes manifest at two levels. On the one hand, inter-organizational relationship outcomes include economic, emotional, operational, and strategic effects, indicating the multidimensional nature of value generated through relationships. On the other hand, these effects are also reflected at the level of individual organizations, primarily in economic and strategic terms. Importantly, the research model implies a feedback loop, that is, the possibility that realized outcomes influence future configurations of relationships and the processes of their development.

Overall, this analysis suggests that inter-organizational relationships result from the complex interaction of structural conditions, process mechanisms, and relational dimensions. However, the authors point to the limitations of a holistic conceptualization of inter-organizational relationships, stemming from the heterogeneity of research approaches, which hinders the precise comparison and integration of research findings. Furthermore, a key issue remains whether the proposed research framework reflects existing research constructs or real process variables of inter-organizational relationships, indicating the need for a deeper and more comprehensive examination of this phenomenon in future studies (Agostini & Nosella, 2017).

The aforementioned developmental trends of the relational paradigm on a global scale, which are not exclusively limited to the B2B market, indicate a progressive tendency driven by contemporary marketing demands, technological shifts, and changes in market participant behavior. The shift in focus from product-centric value to value derived from customer relationships has established inter-organizational relationships as a dominant paradigm of the modern business environment, necessitating more intensive research in this field in the coming period.

Key Aspects of Interaction between Business Sellers and Buyers

In recent decades, interactions between buyers and sellers have become a focal point of marketing analysis within the B2B market. This shift has led to the formulation of various research approaches and models that move the emphasis away from a unilateral treatment of the purchasing process and organizational buying behaviour toward a holistic consideration of interactive links in business relationships. Within the interactive process between organizations, the boundaries between existing organizational entities gradually dissolve, giving rise to the so-called "extended organization."

Drawing from scientific studies aimed at identifying and interpreting the diverse aspects of the highly complex and heterogeneous interactive landscape in the business-to-business market, systematic attempts at conceptual articulation can be observed. In this regard, particular attention is devoted to efforts aimed at more precisely defining: first, the nature of interactions; then, the processes through which relationships are developed and maintained; subsequently, the key components, i.e., the so-called relational connectors; and finally, the overarching relational norms that regulate the behavior of participants (Dević, 2012, 64-68).

Nature and Process of Buyer-Seller Interaction

In academic literature, inter-organizational relationships are examined through multiple perspectives, with analytical focus frequently directed toward interpersonal interactions between organizations. Within the framework of the Nordic School (Håkansson, 1982), which emphasizes interactive benefits within integrated supply chains in industrial markets, several key principles are identified as critical to understanding these processes. First, interactions between buyers and sellers in the B2B market constitute the primary unit of analysis. Second, the effects of interaction evolve from discrete interactive episodes toward more stable relationships within complex inter-organizational networks. Third, each party in the relationship involves individuals and groups whose actions are determined by organizational structure, strategy, technology, attitudes, experience and other factors. Fourth, the development of interaction is significantly influenced by various aspects of the macro-environment, as well as by the relationship atmosphere, that is, the degree of closeness or distance between partners.

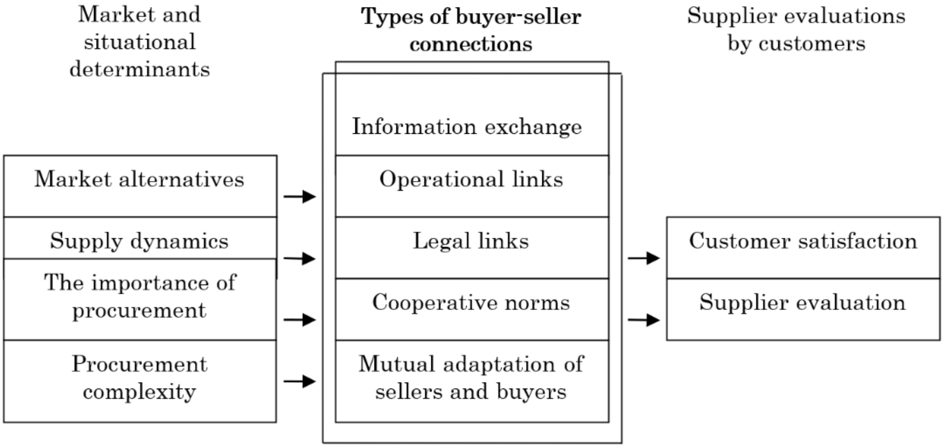
Simultaneously, it is essential to concisely distinguish between the concepts of "relationships" and "interactive episodes." While relationships represent long-term and relatively stable relational structures, interactions refer to short-term, dynamic activities associated with the processes of exchange and adaptation between organizations. This exchange may encompass economic, informational, and social content, which contribute to the construction and transformation of the relationship through repeated interaction.

According to Social Exchange Theory, the buyer-seller interaction is a process in which both parties base their activities on the mutual exchange of value-laden resources. The developmental stages of relationship exchange comprise five distinct phases (Dwyer & Tanner, 2002): (1) awareness, (2) exploration, (3) expansion, (4) commitment and (5) dissolution. The first phase consists of unilateral observation of potential partners and assessing the feasibility of further cooperation phase. The second phase involves initial procurement and partner testing, characterized by a low degree of dependence and simple relationship building. The third or expansion phase is marked by an increase in the volume of exchange and heightened interdependence. The phase of commitment serves as the fundamental basis for sustained, continuous relationships. The last dissolution phase refers to the potential termination of the relationship, noting that substitution costs can present significant challenges for future business operations.

Relational Connectors at the Buyer-Seller Level

Cannon and Perreault (1999, 439–460), utilizing cluster analysis, developed an interactive model that integrates key economic, legal, sociological, and psychological dimensions, thus providing a broader insight into the mechanisms through which business buyers and sellers interact and execute commercial exchange. Within the so-called "interactive zone," positioned between external and experiential factors, their taxonomy identifies five fundamental relational connectors: (1) Information Exchange defined as the mutual sharing of internal data and proprietary information; (2) Operational Linkages referring to the technical alignment of production processes; (3) Legal Bonds based on detailed and structured contractual frameworks; (4) Cooperative Norms reflected in a high degree of collaboration and mutual solidarity; (5) Buyer and Seller Adaptation encompassing communication, procedural, and production-related adjustments.

Figure 3. Schematic representation of key buyer-seller relationship connectors (adapted from Cannon & Perreault, 1999, 442)



Behavioural Norms of Buyer-Seller Interaction

The observation of interactive dynamics within the business-to business market necessitates further insight into the various behavioural patterns manifest within buyer-seller relationships. Given the socio-psychological nature of business relationships, a broad spectrum of mutual norms determines overall relational performance. Nevertheless, the following can be identified as the most significant behavioural norms or prerequisites of interpersonal interaction: (1) Mutual Trust, as a crucial relational factor characterized by the expectation that a specific person or organization will fully honour their obligations or act in the best interest of their partner. (2) Commitment to Mutual Benefit that implies the perceived importance of current or potential relationships to the partners and their explicit intention to sustain them in the future. and (3) Open and Two-Way Communication process as an indispensable prerequisite for relationship building, which has frequently been marginalized in earlier research.

Connelli et al. (2018) emphasize that trust between business partners also serves as a critical economic factor for managing transaction costs within inter-organizational interactions and relationships. Furthermore, trust does not arise solely from a partner's competence (i.e., technical skills, experience, and reliability); it is also contingent upon the perception of their integrity (i.e., motives, honesty, and character). This distinction carries significant managerial and marketing implications for the effective governance of mutual interactions.

The findings of the study (Liu et al., 2017) confirm that a strong customer orientation contributes to the enhancement of relationship quality, which in turn leads to increased loyalty. The research also underscores the importance of B2B supplier management understanding clients' needs and responses. The results further indicate that customer orientation, relationship quality, and commitment serve as key determinants of loyalty, both directly and indirectly, through interconnected relational mechanisms.

Lee et al. (2021) provide insights into how the synergy of communication content, media, and processes influences trust, open communication, and information exchange in both successful and unsuccessful collaborations. The strategic integration of multiple communication channels and content types with formalized communication processes can promote successful cooperative relationships, while simultaneously serving as a signalling mechanism for potential issues in failing interactions.

New Perspectives in Buyer-Seller Interaction

The rapid advancement of information technology has precipitated drastic shifts in buyer-seller interactions, necessitating a re-evaluation and adaptation of traditional postulates to the contemporary circumstances in this sphere (Stanković, 2023).

Ahearne et al. (2022, 22-45) identify two primary categories of change and their strategic implications. Firstly, advancements in information transparency have significantly mitigated information asymmetry between buyers and sellers. Today, buyers frequently possess high levels of product knowledge, pricing insights, and awareness of available alternatives prior to initiating formal contact with a seller. Simultaneously, accelerated technological development is reflected in the gradual transition from traditional face-to-face interactions to remote communication facilitated by sophisticated technological interfaces. This has led to the increasing adoption of hybrid interaction models that synthesize traditonal and digital communication forms to deliver personalized and automated experiences.

In such an environment, the role of the sales is being redefined. Sellers no longer function merely as information conduits; instead, they act as value creators who generate personalized solutions, foster trust, and manage complex customer relationships. Consequently, two key perspectives emerge. From the buyer's perspective, the focus lies on novel methods of technological utilization, managing information overload, and optimizing decision-making processes in a landscape of reduced information asymmetry. From the seller's perspective, the emphasis is on behavioural adaptation to new technological conditions and the cultivation of trust within hybrid interactions that integrate human and technological elements.

Despite the evident need to redefine traditional conceptual models, including the classic buyer-seller dyad, Ahearne et al. (2022, 41) emphasize that interpersonal communication remains a cornerstone of B2B interactions. This is due to the primary importance of establishing long-term relational bonds with organizational buyers.

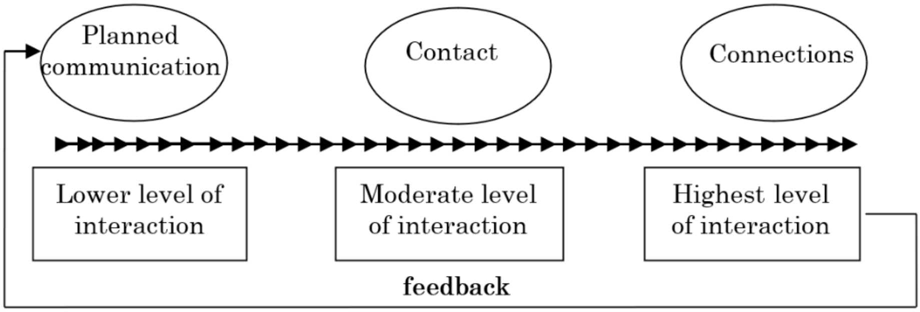
The Relational Function of Market Communications in the Global Inter-organizational Market

Although communication serves as a pivotal component of business relationships, it has historically occupied a secondary role in research concerning interactive processes. Nevertheless, its function in establishing and maintaining inter-organizational links is fundamental. In this context, communication can be defined as a continuous formal and informal exchange of information between organizations, aimed at coordinating activities and resolving shared issues throughout various stages of relationship development. Mature communication processes foster dialogue and cooperation, prevent conflicts, and contribute to the cultivation of mutual trust, while simultaneously facilitating a clearer definition of roles and bilateral participation in decision-making processes. This implies abandoning the traditional view of the customer as a passive recipient of information and shifting toward an interactive communication model in which all actors actively participate in the creation of relationships, which in turn requires an appropriate relational articulation of communication processes (Dević, 2012, 90-96).

A significant contribution to the relational profiling of communication was provided by Grönroos (2004, 99-113), a leading representative of the Nordic School of relationship marketing. He conceptualizes the relational continuum as a functional composition of four components: (1) communication, (2) interaction, (3) dialogue, and (4) value. His framework treats interactions as the core, planned communication processes as the support for establishing and expanding relationships, and dialogue as both a supporting and a focal component. All these elements are strategically oriented toward customer value generation, which is the primary objective of relationship marketing. A distinct aspect of market communication within a relational context is the creation of a multidisciplinary communication process that encompasses all efforts and factors aimed at sustaining business bonds. This process integrates both personal and non-personal communications, as well as immediate feedback loops, including data on customers and other stakeholders within the broader market environment. It should be noted that while Grönroos (2004, 110) formulated this approach primarily for services marketing, but he also emphasizes that the relational perspective in inter-organizational relationships requires an even more comprehensive framework for integrating planned communications with the entire spectrum of interactions involving organizational buyers.

Building upon these theoretical foundations, further elaboration of the communication process within a relational context introduces a trimodal conceptualization of relational communication, applicable to service, inter-organizational, and similar markets. This concept consists of three communication modalities or successive levels of interaction: (1) planned communication; (2) contact creation and (3) connection.

Figure 4. Trimodal conceptualization of relational communication (adapted from Lindberg-Repo, 2001)



(1) Planned Communications encompass traditional forms of communication, such as advertising, sales promotion, sponsorship, and public relations. These forms are primarily characterized by one-way transmission of generalized messaging via mass media, featuring a relatively low degree of interactivity and limited buyer participation. (2) Contact creation involves the more precise design and deve-

lopment of communication activities, including personal selling, web-based communication, direct mail, and related techniques, which enable the establishment and development of two-way relationships with customers, as well as timely responses to their requirements. This phase rests on two critical prerequisites: the continuous collection of relevant customer data during interactions and its application within the communication flow. (3) Connection represents a higher level of relationship development that emerges from and effectively builds upon the preceding phases. As interactivity increases, so does the level of buyer engagement; full connectivity is realized only through the establishment of a balanced and reciprocal dialogue between the interacting participants (Lindberg-Repo & Grönroos, 2004).

Recent scholarly approaches conceptualize inter-organizational communication as a broad and integrative field encompassing various organizational forms, such as alliances, networks, and partnerships, as well as coordinating activities including collaboration, information sharing, and joint problem solving (Shumate et al., 2017). Within this perspective, inter-organizational communication is understood through the structures, forms, and processes generated by message exchange and the co-creation of meaning among organizations and their stakeholders. In this context, several key research streams can be distinguished. The first focuses on the structures, forms, and processes of inter-organizational relationships, where structures include information and communication technologies (ICT), boundary-spanning roles, and network linkages; forms range from informal communities of practice to formal alliance arrangements; and processes encompass partner identification, message creation, relationship maintenance, intellectual property management, and potential transformation or dissolution of relationships. The second stream examines message exchange not only between organizational representatives but also between organizations and their stakeholders, as well as across technological systems, emphasizing challenges such as information protection, semantic differences, and infrastructural incompatibilities. The third stream explores the co-creation of meaning, highlighting how inter-organizational relationships are socially constructed and interpreted by organizational actors and their broader publics. Finally, the fourth stream emphasizes the role of stakeholders whose interests and actions may facilitate or constrain the development of inter-organizational relationships (Shumate et al., 2017).

Within the contemporary technological achievements in global inter-organizational landscape, the Internet stands out as the core technological platform that has fundamentally transformed business practices and redefined the marketing function, especially in domain of communication with organized buyers. As an integrative communication medium, the Internet enables the direction and coordination of marketing and promotional activities, as well as the efficient exchange of information between business partners, thus directly shaping the interactions and development of inter-organizational relationship, which represents a significant prerequisite for development of relational strategies on B2B market and the implementation of Customer Relationship Management (CRM) concepts.

This implementation is further enhanced through integration with systems such as Intranets, Extranets, and Electronic Data Interchange (EDI). These technologies facilitate standardized, secure, and rapid data transmission, thereby optimizing activity coordination, supply chain efficiency and database integration between organizations. Moreover, interactive nature of the Internet technology enables its double function - as a means of Internet communication and as an external channel for development and maintenance of relations with the buyers. In the absence of continuous and technologically supported information exchange with organizational buyers founded on adequate data base and developed communication infrastructure, companies face the acute risk of market marginalization. Thus, transitioning from traditional communication approaches to integrated, digitally-driven solutions representing a key infrastructural foundation of contemporary relational and network concepts is an imperative in global B2B environment (Dević et al., 2015).

Mantrala and Albers (2022) highlight the transformation of B2B sales under the impact of the Internet, noting a shift from traditional transactional selling approach toward models rooted in relationship management and value co-creation. While the Internet has automated routine tasks, it has not eliminated the sales role; rather, it has prompted a functional reorientation from traditional sale toward a consultative communication approach and solution finding in cooperation with the buyers. In this context, the hybrid sales model gains prominence, where the Internet has more complement rather than substitute role. The successful organizations integrate digital channels in their selling processes, using web platforms for information sharing and standardized transactions, while simultaneously maintaining the role of a seller and managing complex relations and implementing consultative sales.

In the contemporary circumstances of information technology development and globalization on the B2B market, communication processes manifest through diverse forms, while each one of them offer a specific contribution to the relation development. Mass communications have a supporting role in creating awareness and positive attitudes in the wider environment, interpersonal communication (personal selling), as a targeted communication, enables the building of trust, commitment and social interaction, while digital (direct) channels contribute to the expediency, adaptability and rationalization of information exchange. In the inter-organizational context, feedback mechanisms are of particular importance, as they enable a better understanding of the needs and expectations of partners and contribute to transparency and the improvement of the quality of decisions. In this sense, communication becomes a supporting element of interaction, mediating between structural conditions and the final outcomes of relationships. The effectiveness of inter-organizational communication is conditioned by the ability of organizations to integrate these different forms into a single and coordinated communication system. Thus, the inter-organizational communication is a dynamic and multidimensional process that integrates different forms of exchange, enables coordination and adaptation of activities, and remains the decisive factor in building stabile and sustainable relationships in the global B2B marketplace.

Conclusion

It can be concluded that relational-communication convergence represents a significant advancement in the integration of marketing strategies and interactions aimed at establishing and sustaining sustainable competitive advantages within contemporary, dynamic market conditions. The intensification of linkages between business entities and their internal and external environments expands the opportunities for more efficient activity coordination, knowledge exchange, and value co-creation - elements increasingly recognized as key performance indicators in the global business-to-business (B2B) environment. Simultaneously, the globalization of the inter-organizational market, coupled with the advancement of information technologies, facilitates various modes of integration with organizational buyers, carrying significant potential for building and deepening customer loyalty. Long-term customer retention is contingent upon their active involvement in the value chain, which necessitates high-quality products and services alongside developed forms of multidimensional communication.

Despite a certain degree of research discontinuity, driven by rapid shifts and the continuous emergence of new practical challenges that refocus research attention, this very context underscores the importance of further theoretical and empirical depth in relational issues. The accelerated development of innovative solutions and heightened competitive dynamics necessitate a constant re-evaluation and refinement of existing conceptual frameworks. In this regard, the strengthening, precise configuration, and optimization of relational concepts within an inter-organizational context constitute an essential foundation for understanding and managing complex market relationships, particularly under the pressures of globalization.

This paper aims to reaffirm and further theoretically articulate the key postulates of the relational approach in the global B2B market, linking them to contemporary trends and practical requirements. Starting from the conceptual framework of inter-organizational relationships as a strategic intent and target projection, it enables the appropriate positioning of relational, interactive, and communication processes as central elements of modern business-to-business marketing. In this context, the relational process is viewed as an integrative and holistic continuum in which relationships, interactions, and communication are mutually interwoven and interdependent.

A specific contribution of this study lies in emphasizing the significance of the communication component, which is often insufficiently addressed within the relational approach. Communication, shaped and supported by modern information technology, is positioned here as an indispensable cohesive mechanism that enables the establishment, maintenance, and development of inter-organizational relationships, thereby transcending its previously reduced role in theoretical discourse.

Given the complexities and challenges of modern business practice, future research should devote greater attention to the further integration of communicative, interactive, and relational aspects, as well as their empirical verification across various inter-organizational contexts. Such efforts would contribute to the development of a more comprehensive and adaptive theoretical and applied framework for managing effective relationships in the global business-to-business marketplace.

References

Agostini, L. & Nosella, A., (2017). Interorganizational Relationships in Marketing: A Critical Review and Research, International Journal of Management Reviews, 19(2), 131-159. DOI:10.1111/ijmr.12084

Anderson, J., Hakansson, H. & Johanson, J., (1994). Dyadic Business Relationship within a Business Network Context, Journal of Marketing, Vol. 58. https://doi.org/10.1177/00222429 94058004

Ahearne, M.,, Atefi, Y ., Lam, SK. & Pourmasoudi, M., (2022). The future of buyer–seller interactions: A conceptual framework and research agenda, Journal of the Academy of Marketing Science, 50(1), 22-45, 41. DOI: 10.1007/s11747-021-00803-0

Baker, M., (1994). The Marketing Book, Butterworth-Heinemann, Oxford, 34-35.

Browder, RE., Koch., H., Long, A. & Hernandez, JM., (2022). Learning to Innovate with Big Data Analytics in Inter-Organizational Relationships, Academy of Management Discoveries 8(1),139-166. https://doi.org/10.5465/amd.2019.0048

Brzustewicz, P., Escher, I., Hermes, J. & Ulkuniemi, P., (2021). Value creation in company–NGO collaboration in corporate volunteering, Journal of Business and Industrial Marketing 36(8), 1504-1519. https://doi.org/10.1108/JBIM-01-2020-0057

Cannon, J.P. & Perreault, W.D., (1999). Buyer-seller relationships in business markets, Journal of Marketing Research, 36(4). https://doi.org/10.1177/00222437 9903600

Connelly, B.L., Crook, T.R., Combs, J.G., Ketchen, D.J.Jr., & Aguinis, H. (2018). Competence - and integrity-based trust in interorganizational relationships: Which matters more?, Journal of Management, 44(3), 919–945. https://doi.org/10.1177/01492063 15596813

Dević, Ž (2012). Upravljanje sistemom tržišnog komuniciranja u poslovnom marketingu, Doktorska disertacija, Ekonomski fakultet, Univerzitet u Prištini (Kosovska Mitrovica).

Dević, Ž., Ćurčić, N. & Radivojević, N. (2014). Kreiranje koncepta marketing komuniciranja na međunarodnom poslovnom tržištu, Ekonomika, 60(3), Društvo ekonomista "Ekonomika", Niš, 227.

Dević, Ž., Đelošević, I. & Mitrović, N. (2015). The use of internet in the marketing communication system in business-to-business market, 5th International Conference "Economics and Management-Based on New Technologies"-EMoNT 2015, Vrnjačka Banja, Serbia, 215-220.

Dhillon, J., (2015), Social capital in inter-organizational partnership research, Handbook of Research Methods and Applications in Social Capital, Edward Elgar Publishing, 303-323. DOI:10.4337/9780857935854.00021

Dwuer, R. & Tanner, J., (2002). Business Marketing: Connecting Strategy, Relationships and Learning, McGraw-Hill, Boston, 49-50.

Dzhengiz, T., (2020). Literature Review of Inter-Organizational Sustainability Learning, Sustainability, MDPI, vol. 12(12), 1-52. https://doi.org/10.3390/su12124876

Dašić, D., Kostadinović, G., & Ilievska Kostadinović, M. (2024). Cultural tourism and its impact on the economic development of local communities. Management horizons, 4 (1). https://hm.edu.rs/index.php/hm/article/view/11

Dašić, D. (2024). Interconnection between product quality, consumer perception, and country of origin influence. Srpska Akademska Misao, 9(1), 52-61. https://www.sam.edu.rs/index.php/sam/article/view/67

Egan, J., (2004). Relationship Marketing: Exploring Relational Strategies in Marketing, Prentice-Hall, Harlow, 174.

Eng T.Y. Ozdemir, S., Gupta. S. & Kanungo, R.P. (2020). International social entrepreneurship and social value creation in cause-related marketing through personal relationships and accountability, International Marketing Review, 37(5), 945–976. https://doi.org/10.1108/IMR-12-2018-0360

Grönroos, Ch., (2004). The relationship marketing proces: communication, interaction, dialogue, value, Journal of Business& Marketing Communications, 19(2), 2004. https://doi.org/10.1108/08858620410523981

Gummesson, E., (2002). Total Relationship Marketing, Butter-worth-Heinemann, Oxford, 20-31.

Hakansson, H., (ed.), (1982). International marketing and purchasing of industrial goods: an interaction approach, John Wiley&Sons, Chichester.

Heath, RG. & Isbell, MG., (2017), Interorganizational collaboration: Complexity, ethics, and communication, Waveland Press, Illinois, 19-22.

Holm, C.G. & Kringelum, L.B., (2022). Intra-organizational business model implications of inter-organizational collaboration, Special Issue: Selected Papers from Business Model Conference 2021, 10(1), 1-10. https://doi.org/10.54337/jbm.v10i1.6827

Hutt, M. & Speh, Th., (1995), Business Marketing Management, The Dryden Pres, Chicago, 259.

Katsikeas, C. S., (2006), Global marketing of industrial products: Contemporary developments and future directions, Industrial Marketing Management, 35(5), 540–544. https://doi.org/10.1016/j.indmarman.2005.10.007

Lee, J.Y.H., Saunders, C., Panteli, N. & Wang, T., (2021). Managing information sharing: Interorganizational communication in collaborations with competitors, Information and Organization 31(2), - https://doi.org/10.1016/j.infoandorg.2021.100354

Liu L.W., Yang W.G. & Liu W.H. (2017). Building the B2B customer loyalty: A role of relationship quality, Polish Journal of Management Studies 16(1), 105-114. DOI:10.17512/pjms.2017.16.1.0

Lindberg-Repo, K. (2001): Customer Relationship Communication – Analysing Communication from a Value Generating Perspective. Helsinki, Finland: Swedish School of Economics.

Linberg-Repo, K. & Grönroos, Ch., (2004). Conceptualising communications strategy from relational perspective, Industrial Marketing Management, 33, 2004., 229-239. https://doi.org/10.1016/j.indmarman.2003.10.012

Milagres, P. & Burcharth, A., (2022). Knowledge transfer in interorganizational partnerships: what do we know?, Business Process Management Journal, 25(1), 27–68. https://doi.org/10.1108/BPMJ-06-2017-0175

Mantrala M.K. & Albers, C., (2022). The impact of the Internet on B2B sales force size and structure; in Handbook of Business-to-Business Marketing, Edward Elgar Publishing, 493-515. https://doi.org/10.4337/9781800376878

Mlađenović, N. (2025). Between global mobility and cultural affiliation. Management horizons, 5(1), 127-134. https://hm.edu.rs/index.php/hm/article/view/10

Penec, ML. & Rauflet, E., (2018). Value Creation in Inter-Organizational Collaboration: An Empirical Study, Journal of Business Ethics, Springer Nature, 148(4), 817-834. https://www.jstor.org/stable/45022539

Perks, H. & Easton, G., (2000). Strategic aliances: partner as customer, Industrial Marketing Management, Vol. 29, 327-338. https://doi.org/10.1016/S0019-8501(00)00110-3

Picazo-Vela, S., Luna, DE., Luna, Gil-Garcia, JR & Luna-Reyes, LF., (2022)., Creating public value through inter-organizational collaboration and information technologies, International Journal of Electronic Government Research (IJEGR), 18(1). 1-18. https://doi.org/10.4018/IJEGR.288069

Seo, R. & Park, JH., (2022)., When is interorganizational learning beneficial for inbound open innovation of ventures? A contingent role of entrepreneurial orientation, Technovation, 116(4). https://doi.org/10.1016/j.technovation.2022.102514

Shumate, M., Atouba, Y., Cooper, K. R., & Pilny, A. (2017). Interorganizational communication. In Scott, C.R., & Lewis, L., (Eds.), The International Encyclopedia of Organizational Communication. Wiley. https://doi.org/10.1002/9781118955567.wbieoc117

Stanković, M. (2023). Management through the focus of international management companies. Srpska Akademska Misao, 7(1), 23-42. https://www.sam.edu.rs/index.php/sam/article/view/4

Tavares, MV., Fortes, V., Vale, J. & Bandeira, AM., (2025). Intellectual Capital and Interorganizational Collaboration: Insights and Future Perspectives, World Conference on Information Systems and Technologies, 141–151. DOI: 10.1007/978-3-031-97799-2_13

Ungureanu, P., Bertolotti, F., Mattarelli, E., & Bellesia, F. (2019). Collaboration and identity formation in strategic interorganizational partnerships: An exploration of swift identity processes. Strategic Organization. 171-211. https://doi.org/10.1177/1476127019840148

Zia, N.U.l., Burita, L. & Yang, Y., (2023). Inter-organizational social capital of firms in developing economies and industry 4.0 readiness: the role of innovative capability and absorptive capacity, Reviews of Management Sciences, Vol 17., 661–682. https://doi.org/10.1007/s11846-022-00539-3

Ekonomski signali, 2025, 21 (1): 053-080

ODNOSI, INTERAKCIJE I KOMUNIKACIJA NA GLOBALNOM POSLOVNOM TRŽIŠTU: KONCEPTUALNI OKVIR

Sažetak: Savremeno poslovno (business-to-business, B2B) okruženje dobija sve veći značaj u globalnim ekonomskim tokovima, što je uslovljeno njegovom inherentnom interorganizacionom prirodom, globalnom orijentacijom, izraženom dimenzionalnošću i dominantnom ulogom u realnim i održivim ekonomskim sektorima. Međutim, ovu oblast i dalje karakterišu deficitarna, disperzirana i nekoherentna istraživanja. To ukazuje na potrebu za konzistentnijim i komprehenzivnijim ispitivanjem i konceptualizacijom odnosa, interakcija i komunikacije na globalnom B2B tržištu. Cilj rada je da identifikuje, sintetizuje i formuliše ključne aspekte i elemente savremenih interorganizacionih odnosa kroz odgovarajući konceptualni okvir. Takav okvir značajno doprinosi uspostavljanju adekvatne platforme za razvoj efektivnih marketinških i raznovrsnih konkurentskih strategija i procesa u ovoj oblasti. Sinergijska integracija odnosa, interakcija i komunikacije predstavlja efikasan pristup identifikovanju potreba kupaca, usklađivanju organizacionih aktivnosti sa satisfakcijom kupaca i održavanju kontinuiranog dijaloga i saradnje kako sa kupcima, tako i sa drugim relevantnim stejkholderima u širem tržišnom okruženju. Za potrebe ove studije, poseban naglasak stavljen je na ispitivanje relevantnosti i održivosti fundamentalnih konceptualnih modela interorganizacionih odnosa i njihovih komunikacionih i interaktivnih dimenzija, kao i na njihovu efektivnu integraciju sa savremenim istraživačkim trendovima u globalnom B2B okruženju.

Ključne reči: globalno B2B okruženje, interorganizacioni odnosi, interakcije, komunikacija, konceptualni pristup

Ekonomski signali, 2026, 21 (1): 081-096
UDK: 005.53:336.71
DOI: 10.5937/ekonsig2601081M

BANK MERGERS AND ACQUISITIONS AS CHOICE STRATEGIES IN BUSINESS DECISION-MAKING

Mirjana Mrvaljević[1], Gordana Jovanović[2], Jasminka Đuričanin[3]

[1,2] Academy of Applied Studies Kosovo and Metohija, Peć in Leposavić Department, Leposavić
[3] Toplica Academy of Applied Studies – Department of Business Studies Blace

[1]mirjana.mrvaljevic@akademija.km.edu.rs, https://orcid.org/0000-0002-0124-0423,
[2]gordana.jovanovic@akademija.km.edu.rs,https://orcid.org/0009-0006 4431-5962
[3] jasminka.djuricanin@vpskp.edu.rs, https://orcid.org/0000-0002-6580-5251

Received: 4.1.2026; Accepted: 15.5.2026.
Review Article
Correspodence: mirjana.mrvaljevic@akademijakm.edu.rs

Abstract: The modern banking sector is characterized by numerous changes driven by globalization, digitalization, and increasing competition in the financial market. Under such conditions, mergers and acquisitions represent an important instrument of restructuring and strategic business decision-making in banks. The aim of this paper is to analyze the impact of mergers and acquisitions on gaining competitive advantage, increasing efficiency, and strengthening the market position of banks. The paper analyzes the motives, risks, and effects of integrations, with special reference to the banking sector of the Republic of Serbia. The research results indicate that mergers and acquisitions contribute to increasing capital concentration, reducing operating costs, expanding banking services, and strengthening the competitiveness of banks. At the same time, integration processes involve certain operational and organizational risks, which is why high-quality business decision-making is of crucial importance for the success of integration.

Keywords: mergers and acquisitions, banking sector, competitive advantage, business decision-making, bank restructuring

Introduction

The structure of the financial system has been undergoing significant changes for several decades. These changes are reflected in the altered importance of certain types of financial institutions, the integration of various groups of financial activities within complex financial institutions, as well as the growth in the size and scope of their operations.

Changing market conditions significantly affect business operations and the achievement of global competitive advantage. As a response to these changes, banks undertake activities aimed at adapting to the newly emerging environment and most often resort to restructuring strategies as mechanisms for overcoming challenges.

Among the most important strategies for restructuring financial institutions are mergers and acquisitions (M&A), as forms of ownership transformation aimed at improving business performance.

The aim of this paper is to analyze the importance of mergers and acquisitions in the process of bank restructuring, as well as to examine their impact on the efficiency, competitiveness, and stability of the banking sector. Special attention will be devoted to the reasons for implementing M&A transactions, their effects on bank operations, and the role they play in the modern financial system.

The main hypothesis of this paper is that mergers and acquisitions represent a significant instrument of bank restructuring, contributing to the strengthening of market position, increasing operational efficiency, and achieving long-term competitive advantage. The auxiliary hypotheses are based on the assumption that successful integration of financial institutions leads to the reduction of operating costs, expansion of the range of services, and increased resilience of banks to changes in the market environment.

Mergers and Acquisitions as Development Strategies

Mergers and acquisitions represent direct investments carried out through corporate consolidation and takeovers. Mergers refer to the combination of two or more companies into a new company. An acquisition occurs when one company takes over another through purchase, thereby changing the ownership structure, while the acquired company loses its independence.

In market economies, mergers and acquisitions enable the transfer of ownership and management control through the takeover of less successful companies by economically more efficient and financially stronger enterprises, thereby strengthening corporate profitability. Globalization is considered one of the main reasons for mergers and acquisitions, although the application of these strategies has also been influenced by technological innovations, deregulation of financial activities, and similar factors. Mergers and acquisitions lead to corporate restructuring.

Restructuring refers to a wide range of activities through which a company changes its existing structure and business strategy in order to increase profitability and operational efficiency, as well as to maintain or improve competitiveness in the market.

Growth and development are also of strategic importance for banks and their survival in a competitive environment. Mergers and acquisitions represent methods of corporate transformation aimed at achieving better market positioning and adapting to changes in the business environment. A merger, also referred to in domestic terminology as integration or fusion, represents a combination of two companies in which the integrated company ceases to exist. In such cases, the acquiring company assumes both the assets and liabilities of the acquired company. This form of integration is also known as a statutory merger. In addition, practice recognizes the subsidiary merger, in which the target company becomes a branch or subsidiary of the parent company.

In mergers, shareholders of the companies being integrated may exchange their shares for shares in the newly formed company. The company with the dominant role in the merger assumes the assets and liabilities of the other company.

A key characteristic of mergers is that the acquired company ceases to exist as a legal entity, while the acquiring company takes over its entire profit, assets, and obligations. The positive effects of these processes are reflected in increased profitability and the possible elimination of undesirable competitors in the market. On the other hand, mergers may also lead to the creation of inflexible corporate structures, reducing the likelihood of achieving positive financial results.

During the last two decades, almost every large company has either implemented an acquisition strategy or participated in a merger process with another company. There is hardly any market today that is not undergoing restructuring aimed at achieving better positioning in the global market.

Specific Characteristics of Bank Mergers and Acquisitions

The primary objective of every bank is to maximize its market value, as this represents the foundation for the further growth and development of the banking system. The implementation of mergers and acquisitions can have positive effects on the financial sector. The very possibility that a bank may become a takeover target encourages its management team to improve operational efficiency and increase the bank's market value.

There are numerous motives that lead banks and other financial institutions to engage in merger and acquisition processes. The main question faced by every management team is whether the bank will achieve a higher level of growth and development than it currently has, since the ultimate goal of every bank is business expansion. The choice is between internal growth and growth through mergers and acquisitions, both of which involve significant uncertainty. However, the difference lies in the fact that growth through integrations and acquisitions is considerably faster than internal growth.

Market power increases with the creation of a post-acquisition entity, leading to higher revenues through price growth. (Gaughan, 2017, p. 45). Financial effects arise immediately after the acquisition and influence the reduction of the capital cost of the new business entity, decrease the risk of illiquidity, and stabilize cash flow fluctuations. Such outcomes also send positive signals to investors, indicating that the company is safer for investment and holds a stronger position in the financial market. (DePamphilis, 2011, p. 102).

The positive effects of implementing mergers and acquisitions strategies include:

- increase in the volume of operations,
- improvement of operational efficiency,
- possibility of generating additional profit (if the management of the acquiring bank is more capable than the management of the acquired bank, there is a greater possibility of creating additional profit, which consequently increases shareholder value),
- reduction of risk through mergers and acquisitions, different

forms of risk may be reduced by creating a new market image through the integration of banks with different business orientations or through the integration of banks with insurance companies and similar institutions.

The risks associated with the implementation of mergers and acquisitions strategies are most significant during the transitional period. In addition to common business uncertainties such as competition and price fluctuations, the acquiring institution is exposed to several additional risks.

Operational Risk

Operational risk increases if, after the acquisition, the acquired company is unable to achieve the expected results. Such a risk arises when the acquiring institution has failed to implement an effective post-acquisition integration plan. In such situations, it becomes impossible to justify the price paid for the target bank.

Financial Risk

Financial risk refers to financial crises that may affect part or even the entire financial system. This type of risk also includes the financial risk of each individual institution.

The most significant risks related to mergers and acquisitions are the following:

1. Liquidity Risk

Liquidity risk represents the possibility that a bank will not be able to meet its due obligations. A bank must ensure sufficient cash resources for settling liabilities both before and after the merger or acquisition process.

2. Interest Rate Risk

Interest rate risk represents the probability that increasing or decreasing interest rates may negatively affect the margin between interest income and interest expenses, or lead to a decline in net asset value. (Rose i Hudgins, 2005, str. 163).

3. Credit Risk

Credit risk represents the possibility that the value of certain assets of a financial institution, particularly loans, may decline and potentially become worthless (Rose i Hudgins, 2005, str. 161). Before concluding an agreement, it is necessary to make proper decisions regarding critical factors such as portfolio value, client structure, service characteristics, and the compatibility of the target bank's clients.

Table: The Most Common Risks in Mergers and Acquisitions Before and After the Transaction

	U okviru zemlje	Internacionalni bankarski m&a
Kreditni sektor	*Nacionalni bankarski m&a*	*Internacionalni bankarski m&a*
	Ex ante: vrednovanje dila i strategijski rizici.	Ex ante: kao i kod nacionalnih bankarskih m&a, ali uvećani usled kulturoloških razlika. Valutni rizik.
	Ex post: operativni rizici – integrisanje sistema upravljanja rizicima, računovodstvanih sistema i procedura interne kontrole.	Ex post: kao i kod nacionalnih bankarskih m&a, ali uvećani usled različitih fiskalnih i računovodstvenih tretmana, kao i zahteva izveštavanja.
U okviru različitih sektora	*Nacionalni konglomerati*	*Internacionalni konglomerati*
	Ex ante: kao i gore navedeni, ali uvećani usled različitih poslovnih oblasti.	Ex ante: maksimalan rizik. Obuhvata sve rizike koji se javljaju kod nacionalnih konglomerata i internacionalnih bankarskih m&a.
	Ex post: kao i gore navedeni, ali uvećani usled različitih fiskalnih i računovodstvenih tretmana, kao i zahteva izveštavanja. Reputacioni rizik prisutan srednjeročno i dugoročno.	Ex post: maksimalan rizik. Obuhvata sve rizike koji se javljaju kod nacionalnih konglomerata i internacionalnih bankarskih m&a. Reputacioni rizik prisutan srednjeročno i dugoročno.

Source: Preuzeto iz *Mergers and acquisitions involving EU banking industry – Facts and implications* (str. 30), autor European Central Bank, 2000.

The table presents the types of risks that arise in mergers and acquisitions within the banking sector, where the risks are analyzed depending on the scope of integration (national/international), as well as whether the integration takes place within the credit sector or across different sectors. The analysis indicates that the complexity and level of risk increase with the internationalization of business operations and the inclusion of different activities in the integration process.

Within the credit sector, in the case of national banking mergers and acquisitions, strategic risks dominate before the merger itself (ex ante). These risks relate to the assessment of the justification of the transaction, the valuation of the target bank, and the evaluation of possible synergy effects. Business decision-making at this stage includes the analysis of market position, financial indicators, and the long-term effects of integration. After the merger (ex post), operational risks arise as a consequence of integrating risk management systems, harmonizing accounting systems, and aligning internal control procedures. This means that management must make decisions that will enable the efficient functioning of the newly created institution.

In international banking mergers and acquisitions, risks are even more pronounced. In addition to the risks present in national integrations, there are also cultural differences, different regulatory frameworks, and currency risk. Business decisions in this case require a higher degree of coordination and the ability of management to operate across different national business systems. After the merger, besides operational risks, problems related to the harmonization of fiscal and accounting treatments and different reporting requirements may also arise. This indicates that the success of international M&A processes largely depends on the bank's ability to adapt its organizational structure and management mechanisms to complex international conditions.

Within different sectors, namely in conglomerate integrations, risks become even more complex. National conglomerates, in addition to the previously mentioned risks, involve additional risks resulting from the integration of different business activities. In the business decision-making process, management must assess the compatibility of different activities, organizational cultures, and operating methods. After integration, issues related to different fiscal and accounting treatments emerge, along with reputational risk, which is present in the medium and long term. This means that negative effects in one part of the conglomerate may affect the reputation of the entire institution.

The highest degree of risk is present in international conglomerates. The table defines them as "maximum risk" because they include all the risks associated with national conglomerates and international banking mergers and acquisitions. In such cases, business decisions are extremely complex because management must simultaneously manage different business activities, different national legislations, currency risks, and cultural differences. Reputational risk is particularly significant because it may jeopardize the trust of clients and investors across multiple markets at the same time.

Based on the analysis of the table, it can be concluded that the process of mergers and acquisitions requires high-quality and strategic business decision-making. The more complex and international the integration process is, the greater the risks and the stronger the need for efficient management. The success of mergers and acquisitions depends not only on the financial strength of institutions, but also on the ability of management to identify risks in a timely manner, make appropriate business decisions, and successfully implement the integration process.

Bank Mergers and Acquisitions as Strategic Business Decisions in Achieving Competitive Advantage

In modern market economies, all changes in the structure of the supply of products and services are closely connected with changes in ownership structure. These changes also lead to transformations in bank management, organizational structure, and the process of business decision-making.

The value of a bank increases through continuous efforts aimed at improving its performance. The result is a higher market value, which represents an indicator of more successful operations and more efficient resource management. Therefore, the process of managing bank value involves making business decisions related to investment, restructuring, and the implementation of new business strategies. In this process, management analyzes financial statements, market conditions, competitive position, and the potential effects of integration in order to determine whether a merger or acquisition will contribute to the long-term growth and stability of the bank.

Processes of ownership and organizational integration directly increase the market power of banking institutions that remain in the market. It can therefore be concluded that mergers and acquisitions represent an important strategy influencing the improvement of bank performance. Ownership takeovers in banking primarily affect bank assets, the strengthening of distribution networks, the development of new products and services, as well as the improvement of the overall banking product portfolio. Business decisions within this process are directed toward increasing competitive advantage and customer satisfaction.

Particularly important is the preventive effect of mergers and acquisitions on bank operations. The very possibility of changes in the management team during the integration process acts as an incentive for the existing management to improve business performance. Management seeks to increase profitability and the market value of the bank in order to reduce the risk of the bank becoming a takeover target. In this way, mergers and acquisitions also influence the quality of corporate governance and the efficiency of business decision-making.

Mergers and acquisitions have significantly changed the structure of the banking industry and contributed to the development of financial markets, which have become more efficient and competitive over time.

In the European market, the trend of integration among large banks has continued in recent years, resulting in the creation of powerful financial institutions with considerable influence on capital flows and the global financial market. Nevertheless, although mergers and acquisitions are becoming increasingly common, they remain highly complex processes involving numerous risks. Therefore, banks must carefully analyze all relevant factors before making a final decision regarding integration.

Bank Mergers and Acquisitions in Serbia - Response to Changes and Results in the Banking Sector

In the existing conditions and within Serbia’s tendency toward accession to the European Union, banks are facing the challenges of the global financial crisis.

Mergers and acquisitions have brought benefits to acquiring institutions in terms of market expansion and growth in the number of clients, while clients themselves have gained a wider choice of banking services. The negative aspect of these strategies in the banking sector is reflected in their implementation through the sale of state-owned shares in banks to foreign investors, which resulted in a reduction in the number of banks operating in Serbia (before the process there were 47 banks, while today there are 26). (Kontić i Kontić, 2009, str. 95).One of the largest acquisitions was the purchase of 90% of Delta Banka shares by Intesa Sanpaolo in 2005 for 462 million euros. In 2006, Banca Intesa also acquired 87.39% of the share capital of Panonska banka for 130 million euros. Furthermore, the National Bank of Greece acquired 99.44% of the share capital of Vojvođanska banka in 2005 for 385 million euros, Alpha Bank acquired Jubanka for 152 million euros, while Erste Bank acquired Novosadska banka for 73.2 million euros. In 2006, the Hungarian OTP Bank purchased 89.39% of Niška banka shares for 14.21 million euros, and later acquired Kulska banka for 118.6 million euros and Cepter banka for 32 million euros (https://www.worldbank.org).

By implementing these strategies, banks improve their competitive position, establish new markets, expand operations, and enhance overall business performance. After the COVID-19 pandemic, new business conditions emerged, resulting in new acquisitions and strategic reorientations as a response to the crisis. Acquisitions ensured stability and operational efficiency for corporations, while also generating benefits for both acquiring institutions and clients.

The banking market in Serbia is characterized by the dominance of approximately six large banks, while around twenty smaller banks hold only 20–30% of the total market share. The number of branches, and consequently the number of employees, has been decreasing. For many years, banks have relied on cost management strategies. Large banks are able to achieve greater flexibility by significantly reducing fixed and intangible costs, including the costs of renting business premises used as branch offices. Nevertheless, large banks still operate with a considerable number of branches and employees.

The population in Serbia traditionally tends to save money in banks despite periods of negative interest rates. Increased savings remain noticeable, although this also reflects the fact that the distribution of income and wealth has become increasingly unequal. A significant increase in profits in the banking sector has been recorded, mainly as a result of higher interest margins. At the same time, there has been growth in both housing and consumer loans. Banks also generate substantial income through credit cards, overdraft facilities, and related financial products. Smaller banks often cannot keep pace with the trend of digital banking because it requires substantial investments in banking IT infrastructure.

One of the most important consequences of structural changes has been the intensive growth and development of the Serbian banking market. Increased presence of multinational banks is noticeable in many countries that have undergone banking sector transformation processes. However, internationalization of banking also has significant disadvantages, such as reduced access to credit for low - and middle-income populations and small and medium-sized enterprises, as well as increased risks in the banking system caused by intensified competition, poor capitalization, or excessive enthusiasm surrounding deregulation.

(Marinković i Ljumović, 2011, str. 195).

After 2010, the number of state-owned banks in Serbia was reduced to four, while today only one state-owned bank remains. At the beginning of 2026, nineteen banks operated in Serbia. It is assumed that within the next several years the Serbian market will consist of around ten larger banks and only a few smaller institutions. Seven largest banks currently control approximately 80% of the domestic banking market. The banking sector in Serbia demonstrated high capital adequacy and stability during the observed period (National Bank of Serbia, 2026).

The changes that occurred in the banking sector of the Republic of Serbia between the early 2000s and 2025 were largely the result of mergers, acquisitions, and takeovers, as well as decisions of the National Bank of Serbia regarding the issuance and revocation of operating licenses. These processes significantly affected the number of market participants, the structure of the banking sector, and the level of competition. The reduction in the number of banks increased market concentration, while simultaneously reducing the level of competition, although larger and better-capitalized banks often contributed to greater stability of the financial system.

Acquisitions and mergers in the Serbian banking sector represented part of the broader transition and modernization of the financial system. Foreign banking groups entered the domestic market with the aim of expanding operations, increasing market share, and strengthening competitive positions. At the same time, domestic banks sought to increase capital strength, improve liquidity, and adapt operations to modern banking standards through integration processes.

According to reports of the National Bank of Serbia, a significant number of important integrations were carried out between 2010 and 2025:

- In 2010, Privredna banka a.d. Pančevo ceased to exist as a separate legal entity after being merged into Poštanska štedionica a.d. Beograd, thereby strengthening the position of the state-owned bank.
- In 2017, Findomestic banka a.d. Beograd was merged
- Into Direktna banka a.d. Kragujevac, leading to a reduction in the number of banks, rationalization of operations, reduction in the number of business units, and lower operating costs.

- Also in 2017, Jubanka a.d. Beograd was merged into AIK banka a.d. Beograd, while OTP banka Srbija became the sole owner of Vojvođanska banka. These transactions significantly increased capital concentration in the banking sector.
- In 2018, Piraeus banka a.d. Beograd was merged into Direktna banka a.d. Kragujevac, continuing the consolidation process of the Serbian banking market.
- In 2019, OTP banka Srbija became the sole owner of Vojvođanska banka a.d. Novi Sad, after which the process of business integration and organizational harmonization continued.

After 2019, the trend of consolidation in the banking sector continued through several major acquisitions:

- NLB Bank acquired Komercijalna banka, significantly strengthening its position in the Serbian market and becoming one of the leading banks in terms of assets and number of clients.
- OTP Bank acquired Société Générale banka Srbija, in addition to the earlier acquisition of Vojvođanska banka, thereby creating one of the largest banking groups in Serbia. This acquisition enabled the expansion of branch networks, growth of the client base, and strengthening of market share.
- Eurobank Direktna was created through the integration of Eurobank and Direktna banka, contributing to operational rationalization and improvement of banking services.
- Raiffeisen Bank acquired Credit Agricole banka Srbija, further strengthening its position in the domestic market and expanding its portfolio of clients and banking products.
- According to an article published by Investitor (2025), AIK Bank finalized its merger in Serbia while simultaneously preparing to enter the Montenegrin market through Hipotekarna Banka. (Investitor, 2025).

The results of these acquisitions are primarily reflected in the increased concentration of the banking sector, reduction in the number of banks, and creation of larger and financially stronger institutions. Large banks possess greater financial resources, more developed technological infrastructure, and wider branch networks, enabling them to operate more efficiently and compete more successfully in the market.

On the other hand, acquisitions have also produced certain negative consequences. The reduction in the number of banks has decreased the level of competition, which may lead to a smaller range of services available to clients and greater market power of large banks. Furthermore, integration processes are often accompanied by workforce reductions, branch closures, and organizational restructuring.

Nevertheless, despite certain negative effects, it can be concluded that mergers and acquisitions have significantly contributed to the stabilization and modernization of the Serbian banking sector.

Conclusion

The processes of mergers and acquisitions represent one of the most significant forms of bank restructuring in modern financial systems. Mergers and acquisitions are an important instrument of business decision-making because they enable banks to adapt more quickly to changes in the environment and achieve a stronger market position.

Business decision-making in the process of mergers and acquisitions involves a detailed analysis of the bank's financial position, assessment of risks, expected synergy effects, and possibilities for integrating organizational structures. Bank management must evaluate whether a merger or acquisition will contribute to increased profitability, strengthening of market share, reduction of operating costs, and improvement of business efficiency. The quality and timeliness of business decisions are crucial for the success of integration and the future operations of the bank.

The analysis of examples from the banking sector of the Republic of Serbia leads to the conclusion that integration processes have significantly influenced changes in the structure of the banking market. The number of banks has been reduced, capital concentration has increased, and larger and financially stronger banking institutions have been created. At the same time, through acquisitions banks have improved their range of products and services, strengthened technological infrastructure, and enhanced risk management systems. All these changes are the result of strategic business decisions aimed at long-term development and strengthening the competitive position of banks.

The research has shown that mergers and acquisitions bring numerous positive effects, such as increased operational efficiency, reduction of operating costs, expansion of market share, and strengthening of the competitive position of banks. Synergy effects are of particular importance because they enable more rational use of resources, higher profitability, and increased bank value. However, integration processes also involve certain risks – operational, organizational, cultural, and reputational - which makes careful planning and efficient business decision-making necessary in all phases of integration.

Based on the conducted analysis, the main hypothesis of this paper can be confirmed, namely that mergers and acquisitions represent a significant instrument of bank restructuring. The auxiliary hypotheses have also been confirmed.

It can be concluded that mergers and acquisitions will continue to play a significant role in the development of the banking sector both in Serbia and globally. Banks that successfully make strategic business decisions, properly assess risks, and efficiently implement integration processes will have greater opportunities for growth, development, and preservation of a stable competitive position in the modern financial market.

References

Gaughan, A. P. (2017). Mergers, acquisitions, and corporate restructurings (7th ed.). John Wiley & Sons.

DePamphilis, D. (2011). Mergers, acquisitions, and other restructuring activities: An integrated approach to process, tools, cases, and solutions (6th ed.). Academic Press.

Kontić, J., & Kontić, Lj. (2009). Merdžeri i akvizicije u bankarskom sektoru. Bankarstvo, 38(5-6), 90–105.

Marinković, S., & Ljumović, I. (2011). Efekti vlasničke transformacije bankarskog sektora Srbije - teorijska i empirijska analiza. Teme, 35(1), 189–208.

Rose, P. S., & Hudgins, S. C. (2005). Bankarski menadžment i finansijske usluge. Data Status.

European Central Bank, Mergers and Acquisitions involving EU Banking Industry-Facts and Implications, 2000.

World Bank. (2026). Data and statistics on global economy. https://www.worldbank.org

Figueiras, Isabel & Gardó, Sándor & Grodzicki, Maciej & Klaus, Benjamin & Lebastard, Laura, 2021. "Bank mergers and acquisitions in the euro area: drivers and implications for bank performance," Financial Stability Review, European Central Bank, vol. 2.

Narodna banka Srbije. (2026). Izveštaji i analize o poslovanju banaka. https://www.nbs.rs/sr_RS/finansijske-institucije/banke/izvestaji-i-analize/

https://investitor.me/2025/03/31/aik-banka-dovrsila-akviziciju-u-srbiji-ocekuje-se-preuzimanje-hipotekarne-u-crnoj-gori/

SPAJANJA I AKVIZICIJE BANAKA KAO STRATEGIJA IZBORA U POSLOVNOM ODLUČIVANJU

Sažetak: Savremeni bankarski sektor karakterišu brojne promene vođene globalizacijom, digitalizacijom i sve većom konkurencijom na finansijskom tržištu. U takvim uslovima, spajanja i akvizicije predstavljaju važan instrument restrukturiranja i strateškog poslovnog odlučivanja u bankama. Cilj ovog rada je analiza uticaja spajanja i akvizicija na sticanje konkurentske prednosti, povećanje efikasnosti i jačanje tržišne pozicije banaka. U radu se analiziraju motivi, rizici i efekti integracija, sa posebnim osvrtom na bankarski sektor Republike Srbije. Rezultati istraživanja ukazuju na to da spajanja i akvizicije doprinose povećanju koncentracije kapitala, smanjenju operativnih troškova, proširenju bankarskih usluga i jačanju konkurentnosti banaka. Istovremeno, procesi integracije nose sa sobom određene operativne i organizacione rizike, zbog čega je kvalitetno poslovno odlučivanje od ključnog značaja za uspeh integracije.

Ključne reči: spajanja i akvizicije, bankarski sektor, konkurentska prednost, poslovno odlučivanje, restrukturiranje banaka

Ekonomski signali, 2026, 21 (1): 97-110
UDK: 341.485
33:341.485
DOI: 10.5937/ekonsig2601097M

GENOCIDE – AN INTERNATIONAL LEGAL ANALYSIS AND ECONOMIC CONSEQUENCES

Miroslav Marković[1]
[1] Faculty of Law, University of Kragujevac
miroslavmarkovic.pravni@gmail.com, https://orcid.org/0009-0006-3717-9798

Received: 11.1.2026; Accepted: 12.5.2026
Review Article
Coresponding: miroslavmarkovic521@gmail.com

Abstracts: This paper examines genocide as one of the most complex international crimes. Starting from the Convention on the Prevention and Punishment of the Crime of Genocide, the paper analyzes the fundamental elements of genocide, emphasizing its specificity in relation to other forms of mass violence, particularly through *dolus specialis*, that is, the existence of a specific genocidal intent aimed at the total or partial destruction of protected groups. In addition to its conceptual definition, the paper analyzes the phases, typology, and normative framework of genocide, both within the national law of the Republic of Serbia and in international law.
Special attention is devoted to the analysis of the theoretical contributions of Raphael Lemkin, the creator of the very concept of genocide, as well as to subsequent legal and sociological critiques of the narrow convention-based definition. The paper also examines the phases of genocide according to George Stanton's model, with particular emphasis on the phase of denial, understood as a permanent and socially harmful continuation of the victimization of affected groups. Furthermore, various types of genocide are analyzed in accordance with theoretical classifications, alongside an examination of the motives and objectives that may underlie its commission.
In addition to the analysis of positive law, the paper examines genocide as an international criminal offense *par excellence*, which constitutes the central focus of this study. This crime transcends the boundaries of national legal systems and represents an obligation of the international community as a whole. In the spirit of protecting fundamental human rights, the paper concludes that the prohibition of genocide constitutes one of the foundations of contemporary international law. The paper also addresses the economic consequences of ge-nocide.

Keywords: Genocide, international law, international crime, economic consequences

Introductory considerations

Genocide represents one of the gravest forms of violations of fundamental human rights and freedoms, as well as the most extreme form of violence directed against entire human communities. As a crime that affects not only its immediate victims but humanity as a whole, genocide occupies a distinctive place in the contemporary legal order and international criminal law. The historical experience of mass atrocities during the Second World War underscored the need for a clear legal definition of this crime. The punishment and prevention of genocide consequently led to the development of specific international legal mechanisms.

The concept of genocide was introduced into legal theory and practice by Raphael Lemkin, who defined it as a coordinated plan aimed at the destruction of a group of people, a notion that will be examined in greater detail in this paper.

In response to the threat that genocide poses to global peace and security, the international community has adopted a number of legal instruments whose purpose is not only to define and sanction this crime but also to serve a significant preventive function. These include the Convention on the Prevention and Punishment of the Crime of Genocide, as the first universal international treaty devoted exclusively to this crime, as well as the statutes of international criminal courts, such as the Statute of the International Criminal Tribunal for the former Yugoslavia and the Rome Statute of the International Criminal Court.

In addition to international mechanisms, national legal systems play a crucial role, as they are obliged to incorporate international standards into their domestic legislation and to ensure the effective punishment of perpetrators. In the criminal legislation of the Republic of Serbia, in accordance with ratified international treaties, genocide is defined as a distinct criminal offense and classified among crimes against humanity and other values protected under international law.

The subject of analysis in this paper is the concept of genocide, its fundamental characteristics and phases of commission, as well as genocide as an international crime within Serbian national legislation and international legal instruments, which constitutes the central focus of the study. Particular attention is devoted to the normative regulation of genocide within the framework of the Convention on the Prevention and Punishment of the Crime of Genocide, the

Statute of the Hague Tribunal, and the Rome Statute of the International Criminal Court, as well as to their significance for the development of international law.

The aim of this paper is to highlight the complexity and specificity of the crime of genocide, as well as the importance of adequate legal definition and sanctioning in order to ensure the prevention of its commission in the future. Methodologically, the paper is based on normative legal analysis of relevant international and domestic regulations, as well as on the theoretical positions of prominent authors in the field of international criminal law. In this regard, the objective is to provide a comprehensive and systematic account of genocide as one of the most serious international crimes.

Conceptual definition of genocide

The Convention on the Prevention and Punishment of the Crime of Genocide defines genocide as acts committed with the intent to destroy, in whole or in part, a national, racial, religious, or ethnic group. In the academic literature, this definition has been subject to criticism, notably by the sociologist Helen Fein, who has pointed to the "narrowness" of the conventional definition, arguing that it lacks a sufficiently detailed description of the violence that characterizes genocide and would render it clearly recognizable to observers. Consequently, a broader definition of genocide has emerged, conceptualizing it as a sustained and purposeful action by the perpetrator aimed at the physical destruction of a collectivity through the prohibition of both social and biological reproduction of group members, regardless of whether the victims pose a threat or have surrendered (Fein, 1993, p. 26). This definition allows for a clearer distinction between genocide and other forms of violence.

Genocide may be distinguished from ethnically motivated massacres by its permanence and repetitive nature, as opposed to the limited scope characteristic of massacres, which do not aim at the systematic destruction of a particular group (Marjanović, 2019, p. 6).

A broader conceptualization of genocide was articulated by Lemkin, who defined it as a coordinated plan of various actions aimed at the destruction of the "essential foundations of the life of national groups," with the ultimate objective of destroying the groups themselves. Such actions include the destruction of culture, language, religion, and other defining characteristics of these groups, as well as severe violations of life, personal security, health, freedom, and other human rights of individual group members. The crime of genocide is directed against the national group as an entity, while actions taken against individuals are not directed at them personally, but at them as members of a specific group (Lemkin, 1944, p. 86).

In his seminal work, Lemkin (1944, p. 87) identified various acts of genocide carried out by Nazi Germany through attacks on specific aspects of life, including:

- the moral aspect, referring to attempts to create an atmosphere of moral degradation by encouraging alcohol abuse;
- the biological aspect, carried out through the depopulation of oppressed peoples and the encouragement of the birth of Germans in occupied territories;
- the cultural aspect, manifested through the prohibition or destruction of cultural activities;
- the social aspect, involving the destruction of social cohesion and, as Lemkin noted, the "elimination or removal of elements that provide spiritual leadership";
- the political aspect, consisting in the destruction of political institutions;
- the religious aspect, implemented through interference with church activities, which in many countries provide both spiritual and national leadership;
- the physical aspect, carried out through the starvation of non-German populations and the mass killing of oppressed groups.

According to Karović, the elements of genocide include:

- subjective elements, namely the intent to partially or completely destroy a group, that is, genocidal intent;
- objective elements, referring to the acts of commission;
- the object of the crime, namely the victim, i.e., protected groups such as religious or national groups (Karović, 2012, p. 89).

Based on the foregoing, genocide may be defined as a crime of an international character consisting of the commission of one or more acts with the aim of destroying a specific group (Jovanović, 2021, p. 4). Genocide is often described as the "crime of crimes" and is frequently the result of policies involving massive violations of human rights. Due to its broad scope, this criminal offense cannot be regarded as an isolated or individual incident (Fabijanić Gagro & Škorić, 2008, p. 1388).

Phases and Classification of Genocide

The theorist George Stanton presented a genocide prevention model in 1996, according to which genocide is divided into eight stages:

- classification, whereby societies distinguish people into "us" and "them";
- symbolization, involving the assignment of symbolic names or markers to particular groups;
- dehumanization, through which the natural human aversion to killing is overcome, for example by equating a group with animals or savages;
- organization, as genocide is always a planned and organized action;
- polarization, achieved through the dissemination of polarized propaganda in the media by the perpetrators;
- identification, whereby perpetrators identify individuals based on religious, racial, or national affiliation;
- extermination, a phase in which only urgent armed intervention may assist the victims;
- denial, the final stage, in which perpetrators invariably deny that genocide has been committed (Genocide Watch, accessed 11 December 2025).

Lemkin also emphasized the existence of two phases in the commission of genocide, referring to it as the "crime of crimes." The first phase involves the destruction of the national symbols of the targeted group, while the second consists in the imposition of the aggressor's national symbols (Lemkin, 1944, p. 88).

Denial, as a phase, serves multiple purposes. As noted by Karčić, it involves the distortion of history in order to justify perpetrators and portray victims as perpetrators, the undermining of historical truth, and a detrimental impact on the psychological and moral well-being of survivors and descendants of victims, thereby hindering their recovery. Following the Second World War and the mass suffering of entire peoples, many states amended their legislation. Countries such as Austria, Belgium, and France introduced the denial of genocide as a separate criminal offense. In 1992, Austria expanded earlier legislation prohibiting the activities of the National Socialist German Workers' Party and support for Nazi ideology by also criminalizing the denial, justification, and endorsement of National Socialist genocide and crimes against humanity (Karčić, 2007, p. 291).

According to Smith, genocide may be classified into five types:

- retributive,
- institutional,
- utilitarian,
- monopolistic,
- ideological (Smith, 1987, pp. 21-39).

Retribution may constitute a significant factor in the commission of genocide and often stems from prior dehumanization of the victim. Institutional genocide is motivated by the desire to demonstrate power and instill terror, with the aim of preventing future retaliation. Utilitarian genocide is characterized by the notion that for some to live well, others must die, with an emphasis on perceived benefit. Monopolistic genocide serves as a means of shaping the structure of both the state and society. Ideological genocide is constructed around an ideology that aspires to a form of salvation, where the desire to eliminate "impure" elements, such as certain classes, becomes predominant (Smith, 1987, pp. 21–39).

Genocide as an international crime

One widely accepted definition of international crimes holds that international criminal law concerns unlawful conduct by a criminally responsible person that violates or endangers values protected under international law, as well as peace among nations and the security of humankind as a whole; such conduct is prescribed by law as a criminal offense for which an appropriate criminal sanction is provided for the perpetrator (Smith, 1987, pp. 132–135).

One of the most important characteristics of these crimes is that they are not subject to statutes of limitations. Offenses envisaged under international criminal law may be committed only with intent and, as a rule, are perpetrated in an organized manner, most often in order to implement a particular ideology. It is also significant that the perpetrator, even when acting in an official capacity, cannot invoke immunity. Given the high degree of social danger posed by such acts, practice seeks to ensure that their perpetrators do not remain unpunished; therefore, jurisdiction may lie not only with the national courts of the states whose nationals the perpetrators are, but also with international criminal courts (Janković & Radivojević, 2011, p. 291).

International courts are competent only for certain criminal offenses (i.e., international crimes in the narrow sense), whereas for other offenses jurisdiction lies with the national judicial authorities of the states whose nationals the perpetrators are (international crimes in the broader sense). This division was first adopted at the 14th Congress of the International Association of Penal Law, held in Vienna in 1989.

Genocide under the Statute of the Hague Tribunal

The Statute of the "Hague Tribunal," i.e., the International Tribunal for the Prosecution of Persons Responsible for Serious Violations of International Humanitarian Law committed since 1991 in the territory of the former SFRY, was adopted on 25 May 1993 by United Nations Security Council Resolution 827 (https://www.icty.org/x/file/Legal%20Library/Statute/statut_827_1993_bcs.pdf, accessed 24 December 2025). The Security Council expressed grave concern due to increasingly frequ-ent reports of violations of international humanitarian law in the territory of the former SFRY, particularly in Bosnia and Herzegovina, and adopted Resolution 771 (https://sr.wikipedia.org/wiki/Резолуција_Савета_безбедности_УН_771, accessed 24 December 2025), which served as the impetus for the adoption of the aforementioned Statute. The reports cited, inter alia, mass forcible expulsions of the population, deportations of civilians, illtreatment, attacks on non-combatants, attacks on health facilities, hospitals and clinics, destruction of property, and other acts (Vasiljević, 1996, pp. 153–154). Pursuant to the Statute (https://www. icty.org, accessed 24 December 2025), the Tribunal in The Hague has jurisdiction over violations of the laws or customs of war, crimes against humanity and genocide (the "crime of crimes"), as well as grave breaches of the Geneva Conventions of 1949.

Under the Statute, genocide consists in the "intentional destruction, in whole or in part, of a national, religious, racial or ethnic group, or the intentional subjection of members of the group to living conditions calculated to bring about its destruction, in whole or in part." In the practice of the Hague Tribunal, an interpretation of genocide as the destruction of a group without its physical destruction is not accepted (Collection of the Institute for Criminological and Sociological Research, 2016, p. 22).

Individual criminal responsibility constitutes a key element of the Tribunal's jurisdiction. The international court is competent to prosecute perpetrators of genocide regardless of whether they are officials. Consequently, legal persons do not bear responsibility before the Tribunal (Kostić, 2017, p. 26).

No accused person shall receive a mitigated sentence on the basis of official position, except where they acted pursuant to an order of the Government. An order by a superior is treated by the court as a mitigating circumstance, and sentence mitigation is applied only where it is in the interests of justice (Kostić, 2017, p. 26).

The principle that a person shall not be tried twice for the same conduct (ne bis in idem) applies before the Hague Tribunal. However, this principle does not prevent the subsequent initiation of proceedings before the Tribunal in two cases: (1) where the conditions of a genuine ability to try the case, impartiality, and independence were not guaranteed in proceedings before national courts; and (2) where the legal qualification of the act before a national court does not correspond to the qualification under the Statute (Jovašević, 2010, pp. 113–116).

The penalties envisaged by the Tribunal include imprisonment, as well as the return of property to the rightful owners (restitution) and the disgorgement/return of profits obtained through criminal conduct (Kostić, 2017, p. 26).

Genocide under the Rome Statute

The treaty establishing the International Criminal Court is the Rome Statute, adopted at the Diplomatic Conference held in Rome in 1998, which has the character of an international treaty. It entered into force in 2002, defining the jurisdiction, functions, and structure of the ICC, and has been ratified by the Republic of Serbia. Under the Rome Statute, the International Criminal Court is a supranational, permanent, and universal judicial body.

Criminal proceedings before the Court are conducted against persons who commit crimes recognized by the international community, with the determination of individual criminal responsibility and the imposition of appropriate sanctions. Accordingly, the Court has jurisdiction over the crime of genocide (Article 6 of the Statute), war crimes, the crime of aggression, and crimes against humanity (Kostić, 2017, p. 26).

The principles of ne bis in idem, the exclusion of criminal responsibility of minors, the prohibition of retroactivity, and the principle of legality of crimes and penalties are among the fundamental principles upon which the Court's operation is based (Jovašević, 2010, pp. 114–116).

Pursuant to the Statute, the crime of genocide consists in the intent to destroy, in whole or in part, an ethnic, national, or religious group, through the following acts:

- causing serious bodily or mental harm to members of the group;
- forcibly transferring children of the group to another group;
- deliberately inflicting on the group conditions of life calculated to bring about its physical destruction;
- imposing measures intended to prevent births within the group; and
- killing members of the group (Kostić, 2017, p. 29).

The Court has jurisdiction over adult natural persons who are nationals of a State Party to the Rome Statute or of a state that has accepted the Court's jurisdiction ad hoc. The Court may also exercise jurisdiction over superiors or commanders who issue orders for the commission of genocide, pursuant to the principle of command responsibility (Janković & Radivojević, 2011, pp. 289–290).

Genocide under the Convention on the Prevention and Punishment of the Crime of Genocide

In 1946, the United Nations General Assembly adopted Resolution 96 on the crime of genocide. The Resolution called upon all Member States to condemn this heinous crime and to incorporate provisions for its prevention and suppression into their domestic legislation. The Economic and Social Council was tasked with drafting the Convention on the Prevention and Punishment of the Crime of Genocide, which was subsequently adopted by General Assembly Resolution 260. The Convention entered into force in 1951 and was ratified by the then Socialist Federal Republic of Yugoslavia.

This Convention represents a landmark instrument in the development of international law. It strengthens the international legal subjectivity of individuals independently of domestic law, based solely on their personal responsibility (Kostić, 2017, p. 23).

In addition to the commission of genocide itself, the Convention provides for the punishability of conspiracy to commit genocide, direct and public incitement, attempt, and complicity in genocide. Notwithstanding the fact that this crime is directed against a group of persons, the Convention stipulates that genocide exists regardless of the number of victims (Kostić, 2017, p. 23).

Economic consequences

In the analysis of genocide as a social and economic-political phenomenon, Ferrero (2013, p. 333) raises a key question that goes beyond moral condemnation and introduces a rational dimension of choice: whether rulers who kill a larger number of people represent greater criminals than those who kill fewer, or whether their decisions are primarily conditioned by an assessment of the costs of different courses of action. In this context, the question arises as to whether genocide constitutes an end in itself or rather the outcome of a calculation in which the cost of genocidal action is lower compared to other means of removing a particular population group (Brauer & Anderton, 2014, p. 1).

When the problem is observed from the perspective of a dictatorial regime, that is, an authoritarian ruler who possesses real or perceived legitimacy to remove members of an external group from the territory he controls or to which his internal group lays claim, the issue becomes one of identifying the most efficient means of achieving that objective. In such circumstances, genocidal killing does not necessarily represent the most obvious choice, since the act of mass killing itself generates significant costs not only for the victims but also for the perpetrators, including political, economic, and social consequences. It is precisely in the fact that genocide entails costs for the perpetrators that potential opportunities for its prevention may be identified. Historical examples, including the genocide perpetrated by the Nazi regime, the Khmer Rouge, or the genocide in Rwanda, demonstrate that genocide does not arise spontaneously or "by itself," but rather constitutes the result of conscious choices shaped by assessments of the relative costs of different strategies for eliminating an external group (Brauer & Anderton, 2014, p. 1).

Furthermore, genocide may also be understood as an outcome of constraints that affect the ability of victims to avoid removal. The position of victims may be defined by the degree of effectiveness of the constraints imposed by perpetrators on the external group, as well as by the inability of victims to remove the structural and institutional "shackles" that prevent escape or resistance. Consequently, victimization should not be viewed exclusively as a moral category, but also as the result of asymmetric power relations and limited opportunities for action (Brauer & Anderton, 2014, p. 1). Genocide is likewise influenced by the choices of third parties, who, although neither direct perpetrators nor immediate victims, may through their actions facilitate, prevent, or indirectly support genocidal policies. Decisions by third states to close borders and prevent the escape of victims, or alternatively to open them at high economic and political costs associated with accepting refugees, represent a significant factor in the dynamics of genocide. As Ferrero emphasizes, when the problem of genocide is framed as a matter of choice under constraints, economics emerges as a natural analytical tool, since it examines individual and collective decision-making under conditions of limited resources, as well as the political, economic, and cultural consequences of such decisions (Ferrero, 2013, p. 333).

Concluding remarks

Genocide represents the most extreme international crime and one of the gravest violations of fundamental human rights and values protected by international law. Its essence lies not only in the physical destruction of members of protected groups but also in the systematic annihilation of their identity, culture, and biological survival. The permanence of its consequences and the comprehensive nature of genocide distinguish it from other international crimes and justify its special status within national criminal legislations.

Throug h the analysis of the conceptual definition of genocide, it has been established that genocide constitutes a legal concept of complex structure, the elements of which are precisely defined in positive law. Genocidal intent, as a subjective element, is of particular importance, and without it the existence of this criminal offense cannot be established. The proof of such specific intent represents one of the greatest challenges in judicial practice.

By examining the phases and typologies of genocide, it has been demonstrated that this crime does not emerge suddenly, but rather as a gradual process involving dehumanization, the institutionalization of violence, and the systematic exclusion of victims from the social and legal order. This fact is of particular importance for prevention, as it enables the timely identification of genocidal policies. From this perspective, genocide should not be viewed solely as the final phase of mass violence, but as a process requiring a continuous social and legal response.

The analysis of the international legal framework, through the prism of the Statute of the Hague Tribunal, the Rome Statute of the International Criminal Court, and the Convention on the Prevention and Punishment of the Crime of Genocide, demonstrates that the international community has established a relatively coherent system of legal accountability for this crime. However, practice indicates the existence of numerous challenges, particularly with regard to political influence, selective application of the law, and evidentiary difficulties. This paper highlights the importance of a phased approach to genocide as an analytical tool for its early identification, as well as the necessity of strengthening both international and national accountability mechanisms.

In conclusion, the fight against genocide represents a permanent task of the international community as well as individual states, requiring the continuous improvement of legal norms, institutions, and enforcement mechanisms. Only through the consistent application of international law and the strengthening of a culture of human rights can the recurrence of this crime be prevented and the protection of human dignity ensured.

References

Vasiljević, A, International Criminal Tribunal, Belgrade, (1996).

Jovašević, D., International Criminal Offences: Responsibility and Punishment, Niš, (2010).

Proceedings of the Institute for Criminological and Sociological Research, No. 1. Belgrade, (2016).

Brauer, J., & Anderton, C. Economics and Genocide: Choices and Consequences. College of the Holy Cross, (2014).

Jovanović, I. The Criminal Offence of Genocide (Undergraduate thesis). Faculty of Security Studies, University of Belgrade, (2021).

Marjanović, J. Genocide and Crimes Against Humanity (Undergraduate thesis). Faculty of Security Studies, University of Belgrade, (2019).

Ferrero, M. Extermination as a Substitute for Assimilation or Deportation: An Economic Approach. Institute of Public Policy and Public Choice, (2013).

Janković, M. B., & Radivojević, Z. International Public Law. Faculty of Law, University of Niš. (2011).

Lemkin, R. Axis Rule in Occupied Europe: Laws of Occupation, Analysis of Government, Proposals for Redress. Washington: Carnegie Endowment for International Peace, (1944).

Smith, R. W. Human Destructiveness and Politics: The Twentieth Century as an Age of Genocide.

In Genocide and the Modern Age, (1987).

Karović, S. The Relationship Between Genocide and Crimes Against Humanity. Civitas, (2012).

Fabijanić Gagro, S., & Škorić, M. The Crime of Genocide in the Practice of International Ad Hoc Criminal Tribunals. Collected Papers of the Faculty of Law in Zagreb / University of Rijeka, (2008).

Karčić, F. The Criminal-Law Prohibition of Genocide Denial – A Comparative Perspective. Yearbook of the Faculty of Law in Sarajevo, No. 10, (2007).

Fein, H. Genocide: A Sociological Perspective. London: Sage Publications, (1993).

Legal sources

Criminal Code of the Republic of Serbia, Official Gazette of the RS, Nos. 85/2005, 88/2005 (corr.), 107/2005 (corr.), 72/2009, 111/2009, 121/2012, 104/2013, 108/2014, 94/2016, 35/2019, 94/2024.

Law on the Ratification of the Rome Statute of the International Criminal Court, Official Gazette of the FRY – International Treaties, No. 5/2001.

Internet sources

Convention on the Prevention and Punishment of the Crime of Genocide, accessed 10 December 2025.

Genocide Watch, accessed 11 December 2025.

ICTY Statute, accessed 24 December 2025.

United Nations, accessed 26 December 2025.

Prevent Genocide International, accessed 26 December 2025.

GENOCID – MEĐUNARODNA PRAVNA ANALIZA I EKONOMSKE POSLEDICE

Sažetak: Ovaj rad ispituje genocid kao jedan od najsloženijih međunarodnih zločina. Polazeći od Konvencije o sprečavanju i kažnjavanju zločina genocida, rad analizira fundamentalne elemente genocida, naglašavajući njegovu specifičnost u odnosu na druge oblike masovnog nasilja, posebno kroz *dolus specialis*, odnosno postojanje specifične genocidne namere usmerene na potpuno ili delimično uništenje zaštićenih grupa. Pored konceptualne definicije, rad analizira faze, tipologiju i normativni okvir genocida, kako u okviru nacionalnog prava Republike Srbije, tako i u međunarodnom pravu.

Posebna pažnja posvećena je analizi teorijskih doprinosa Rafaela Lemkina, tvorca samog koncepta genocida, kao i kasnijim pravnim i sociološkim kritikama uske konvencijske definicije. Rad takođe ispituje faze genocida prema modelu Džordža Stentona, sa posebnim akcentom na fazu poricanja, shvaćenu kao trajni i društveno štetni nastavak viktimizacije pogođenih grupa. Štaviše, različiti oblici genocida analiziraju se u skladu sa teorijskim klasifikacijama, uz ispitivanje motiva i ciljeva koji mogu biti u osnovi njegovog izvršenja.

Pored analize pozitivnog prava, rad ispituje genocid kao međunarodno krivično delo *par excellence*, što čini centralni fokus ove studije. Ovaj zločin prevazilazi granice nacionalnih pravnih sistema i predstavlja obavezu međunarodne zajednice u celini. U duhu zaštite osnovnih ljudskih prava, rad zaključuje da zabrana genocida predstavlja jedan od temelja savremenog međunarodnog prava. Rad se takođe bavi ekonomskim posledicama genocida.

Ključne reči: Genocid, međunarodno pravo, međunarodni kriminal, ekonomske posledice

Ekonomski signali, 2026, 21 (1): 111-128
UDK: 005.57(049.32)
DOI: 10.5937/ekonsig2601111R

A CRITICAL APPRAISAL OF THE SCIENTIFIC MONOGRAPH "CORPORATE COMMUNICATIONS": THEORETICAL FRAMEWORKS, CONTEMPORARY CHALLENGES, AND PRACTICAL IMPLICATIONS FOR ORGANIZATIONAL COMMUNICATION MANAGEMENT

Milijanka Ratković[1]
[1] Faculty of sport, University "UNION – Nikola Tesla", Beograd
milijanka.ratkovic@fzs.edu.rs, http: //orcid.org/ 0000-0001-7946-354X

Received: 14.2.2026; Prihvaćeno: 09.5.2026
Review Article
Coresponding: milijanka.ratkovic@fzs.edu.rs

Abstracts: This paper presents a critical appraisal of the scientific monograph *Corporate Communications* authored by Dr. Dejan Dašić, a comprehensive and systematic scholarly work dedicated to the study of corporate communication as one of the key functions of contemporary management. The monograph examines the theoretical foundations, models, strategies, and instruments of corporate communications, with particular emphasis on the role of communication in building corporate identity, reputation, and relationships with stakeholders. The author discusses the importance of internal and external communication, crisis communication management, media relations, the digital transformation of communication processes, and contemporary challenges arising from the development of new information and communication technologies. The monograph is characterized by an interdisciplinary approach that successfully integrates theoretical concepts with practical examples from business practice. Its particular value lies in its contribution to the advancement of scientific knowledge in the field of corporate communications, as well as its applicability in academic education, research activities, and professional practice. There-fore, the monograph may be regarded as a significant contribution to under-standing contemporary communication processes within organizations and their role in achieving strategic objectives.

Keywords: corporate communications, corporate identity, corporate reputation, communication management, stakeholders

Introduction

In an era characterized by intensive digitalization, market globalization, and increasingly complex relationships between organizations and their stakeholders, corporate communications have become one of the key functions of contemporary management. Modern organizations can no longer achieve their strategic objectives solely through production, financial, or sales activities; instead, they must systematically manage communication processes that shape corporate identity, reputation, and public trust. For this reason, scientific and professional literature in the field of corporate communications has gained growing importance in both academic circles and business practice.

The scientific monograph Corporate Communications, authored by Dr. Dejan Dašić, represents a significant contribution to the development of domestic scholarly literature in this field. Published in 2026 by the Business Studies College of Applied Sciences in Niš, the monograph is classified as a scientific monograph and comprises 393 pages accompanied by an extensive bibliography. Consisting of eleven chapters, the work provides a comprehensive examination of the theoretical foundations, models, strategies, and instruments of corporate communication, with particular attention devoted to the contemporary challenges arising from digital transformation, new media, and changes in the communication habits of various stakeholder groups.

A particular scientific value of the monograph lies in its interdisciplinary approach, as the author successfully integrates knowledge from the fields of management, marketing, public relations, media studies, and organizational behavior. In doing so, the monograph transcends a narrowly disciplinary perspective and offers a holistic understanding of corporate communications as a complex system of strategic importance for the functioning of modern organizations.

In addition to the author, the scientific validation of the monograph involved distinguished scholars and university professors who contributed through the peer-review process. According to the bibliographic information and imprint of the publication, the reviewers of the monograph were Professor Milovan Vuković, PhD, Professor Ivan Milojević, PhD, and Professor Milan Stanković, PhD. Their involvement further confirms the scholarly rigor and academic credibility of the publication.

The aim of this critical appraisal is to analyze the structure, content, scientific contribution, and practical value of the monograph Corporate Communications, as well as to highlight its significance for students, researchers, and practitioners engaged in communication management, public relations, marketing, and related academic disciplines.

Theoretical Foundations and Strategic Framework of Corporate Communications

The monograph Corporate Communications by Professor Dejan Dašić, PhD, is built upon a clearly conceptualized theoretical framework that gradually introduces readers to the complex field of corporate communication. The first five chapters of the monograph constitute the theoretical and conceptual foundation of the entire work. The author begins with the fundamental definitions of corporate communications, their historical development, and their role within the contemporary organizational environment, before progressively moving toward an analysis of communication theories, models, corporate identity, internal communications, and stakeholder relations. Such a structure enables readers to systematically acquire the key concepts necessary for understanding corporate communication as a strategic management function.

One of the major strengths of the monograph lies in the fact that the author views corporate communications as far more than a mere process of information transmission (Dašić, 2026). Communication is presented as an instrument for implementing organizational strategy, building reputation, and managing relationships with various stakeholders. This perspective is fully aligned with contemporary scholarly understanding, according to which corporate communications represent one of the principal mechanisms for strategy implementation and for connecting management with internal and external publics (Argenti, 2017; Garača et al., 2013).

In the second chapter, the author successfully integrates both classical and contemporary theoretical approaches to corporate communication. Particularly noteworthy is the inclusion of Stakeholder Theory, Organizational Culture Theory, Reputation Management Theory, and Situational Theory of Publics, enabling readers to understand communication as a complex process that extends beyond the traditional sender-receiver relationship. At the same time, the discussion of communication models, ranging from the Shannon-Weaver model to the integrated corporate communication model, provides a solid theoretical basis for understanding contemporary communication processes within organizations.

A significant portion of the monograph is devoted to the analysis of corporate identity and branding. The author highlights the interconnectedness of corporate identity, organizational culture, values, and reputation, emphasizing that successful organizations do not build their brands solely through marketing activities but through the consistent communication of their values. Indeed, the relationship between strategy, brand, and corporate reputation is one of the most important dimensions of contemporary corporate communications, as confirmed by studies demonstrating that corporate communication directly influences strategy implementation, brand positioning, and organizational reputation building (Forman & Argenti, 2005).

Particular value is also found in the chapters dedicated to internal communications and stakeholder communication. The author emphasizes that successful external communication cannot be achieved without well-developed internal communication mechanisms, organizational trust, and employee engagement. Employees represent a critical prerequisite for customer satisfaction, particularly in service industries (Ratković et al., 2012; Ratković et al., 2017). Given that strong customer relationships are a central objective of the contemporary marketing concept, the importance of internal communication becomes evident (Ratković et al., 2011).

At the same time, through the analysis of corporate social responsi-ility and stakeholder relationship management, the monograph demonstrates that modern organizations increasingly depend on their ability to establish long-term and mutually beneficial relationships with their environment. Many scholars further expand the analysis of corporate responsibility by incorporating the role of consumers and their own social responsibility, thereby making this field even more complex and interconnected with numerous other areas of study (Jotanović et al., 2017). In this regard, the author demonstrates an excellent understanding of important themes and related disciplines, opening pathways for new research questions and theoretical relationships. The subtle yet sufficiently comprehensive treatment of topics that are not the primary focus of the monograph, but which significantly enrich the reader's understanding of corporate communications, reflects the breadth of the author's knowledge and his high level of expertise in both theory and practice.

Viewed as a whole, the first five chapters of the monograph provide a well-structured and scientifically grounded presentation of the theoretical foundations of corporate communications. By combining classical theoretical concepts, contemporary research findings, and numerous practical examples, the author has successfully developed a coherent theoretical framework that serves as a valuable basis for understanding contemporary communication challenges and practices.

Conceptualizing Corporate Communications: Theories, Models, and Organizational Identity

In the monograph *Corporate Communications*, Professor Dejan Dašić, PhD, establishes the conceptualization of corporate communications as the foundation for understanding the organization as a communication, management, and identity system. The author begins by defining corporate communications, examining their historical development and their relationship with business and marketing communications. The analysis is subsequently expanded to include communication theories, models, and the key elements of corporate identity. In this way, the first three chapters of the monograph create a logical progression from a general understanding of communication to its strategic role in shaping organizational identity, image, and reputation.

A particular strength of this section of the monograph lies in the fact that corporate communications are not presented merely as a technical process of sending and receiving messages, but rather as an integrated system for managing meaning, relationships, and perceptions. In this context, the discussion of theories such as Stakeholder Theory, Organizational Culture Theory, Reputation Management Theory, and Corporate Identity Theory enables readers to understand how communication functions both within organizations and in relation to their external environment. Such an approach is consistent with contemporary understandings of corporate identity, according to which identity cannot be reduced solely to visual elements but encompasses organizational behavior, communication, culture, strategy, and the ways in which different stakeholder groups perceive and interpret the organization (Cornelissen & Elving, 2003).

By incorporating both classical and contemporary communication models, the author further strengthens the theoretical foundation of the analysis. The models of Shannon and Weaver, Schramm, Lasswell, Berlo, Grunig and Hunt, as well as integrated corporate communication models, allow the communication process to be examined from multiple perspectives: as the transmission of information, as the interpretation of meaning, as interaction with publics, and as the strategic management of relationships. This demonstrates that corporate communications constitute an interdisciplinary field that integrates management, public relations, marketing, organizational culture, and media studies.

Particularly noteworthy is the way corporate identity is examined in relation to branding, corporate design, organizational values, and culture. This approach enables a clearer understanding of the fact that organizations communicate not only through official messages but also through symbols, visual identity, employee behavior, leadership decisions, and their overall relationships with stakeholders. Balmer (2017) emphasizes that corporate identity, corporate communications, and stakeholder perceptions should be viewed as an interconnected continuum, since organizational identity acquires its full meaning only through its relationship with those who observe, evaluate, and interact with the organization.

Viewed as a whole, this section of the monograph possesses considerable scholarly and educational value because it introduces readers to the fundamental concepts necessary for understanding the complexity of contemporary corporate communications. The author successfully integrates theories, models, and organizational identity into a unified analytical framework, demonstrating that corporate communication is not an isolated business activity but rather a strategic function that shapes how organizations understand themselves, present themselves to others, and build long-term relationships with their various publics.

Internal Communications, Stakeholders, and Corporate Social Responsibility as the Foundation of Contemporary Corporate Governance

A significant segment of the monograph Corporate Communications is devoted to the analysis of internal communications, stakeholder relationship management, and corporate social responsibility. These topics are addressed in the fourth and fifth chapters and represent a logical continuation of the previously presented theoretical foundations of corporate communication. The author proceeds from the premise that organizations cannot achieve long-term business objectives without effective communication with their employees, nor without maintaining high-quality relationships with key stakeholders in their environment. In this way, corporate communications acquire a broader dimension and become an instrument for building organizational trust, legitimacy, and social responsibility (Lunić & Ćesarević, 2025; Dašić, 2026b).

In the section dedicated to internal communications, the author places particular emphasis on trust, organizational culture, and employee engagement as essential prerequisites for the successful functioning of contemporary organizations. Various models and approaches to trust development are presented, together with modern communication platforms that facilitate faster and more efficient information exchange within organizations. This perspective is fully consistent with contemporary research demonstrating that effective internal communication directly influences employee engagement, organizational commitment, and overall business performance (Karanges et al., 2015). Employees are increasingly viewed as key brand ambassadors, making communication with them one of the most important elements of corporate strategy.

Another particularly important area of the monograph is the analysis of stakeholder communication. The author provides a detailed examination of different stakeholder groups, their expectations, interests, and communication needs. This approach allows readers to understand organizations as components of a broader social system in which success depends on the ability to manage diverse interests and establish stable relationships with key actors. Contemporary scholarly literature confirms that organizations adopting a systematic approach to stakeholder communication achieve higher levels of trust, reputational stability, and long-term sustainability (Greenwood, 2007).

A further significant aspect of this section of the monograph concerns corporate social responsibility (CSR). The author does not view CSR merely as a philanthropic activity but rather as an integral component of corporate strategy and communication policy. Particular attention is devoted to the ethical, legal, economic, and philanthropic foundations of social responsibility, as well as to the global normative frameworks that shape contemporary responsible business practices. Such an approach enables readers to understand how corporate social responsibility has become an important instrument for building corporate reputation and strengthening relationships with various stakeholder groups.

Viewed as a whole, the fourth and fifth chapters successfully integrate internal communications, stakeholder management, and corporate social responsibility into a unified conceptual framework. The author demonstrates that contemporary corporate governance encompasses far more than the management of business processes; it requires the continuous cultivation of trust-based relationships with employees, business partners, local communities, investors, and other stakeholders. For this reason, this thematic section represents one of the most valuable parts of the monograph and a significant contribution to the understanding of contemporary corporate communications.

Contemporary Communication Practices, Global Challenges, and Ethical Dimensions of Corporate Communication

The second major thematic section of the monograph Corporate Communications encompasses six chapters dedicated to public relations, media communications, crisis management, the digital transformation of communication processes, the measurement of communication effectiveness, global communications, and the ethical challenges of the contemporary corporate environment. Unlike the preceding chapters, which primarily focus on the theoretical foundations of corporate communication, this section represents a practical extension of the theoretical framework and demonstrates how organizations apply communication strategies in conditions characterized by digitalization, globalization, and the growing expectations of diverse stakeholder groups.

A particular strength of this part of the monograph lies in its analysis of media relations and public relations as key instruments of corporate communication. The author emphasizes that contemporary organizations can no longer control communication flows in a traditional manner; instead, they must develop continuous dialogue with various publics. In this context, public relations emerge as a strategic function for managing organizational relationships, reputation, and legitimacy. Contemporary research confirms that communication professionals are increasingly involved in strategic decision-making processes and organizational change management, further highlighting the significance of communication management in modern organizations (Zerfass et al., 2018; Dašić, 2018).

A prominent place within the monograph is also devoted to crisis communication and reputation management. The author examines various types of organizational crises, communication response strategies, and the role of the media in shaping public perceptions of crisis events. Particularly important is the treatment of reputation as a strategic organizational asset that requires years to build but can be seriously damaged within a very short period of time (Dašić et al., 2024; Vitković et al., 2026). This perspective is fully consistent with contemporary scholarly approaches that regard crisis communication as one of the most important instruments for preserving organizational trust and reputation (Coombs, 2007).

In subsequent chapters, the author explores the impact of digitalization and social media on corporate communications. Particular emphasis is placed on the advantages of digital platforms in terms of communication speed, stakeholder interaction, and the personalization of messages. At the same time, attention is drawn to numerous challenges arising from increased business transparency, the spread of misinformation, and the necessity of continuous online reputation monitoring. The author successfully demonstrates that digital transformation has altered not only communication channels but also the very nature of relationships between organizations and their publics.

The chapters devoted to measuring communication effectiveness and global communications represent a particularly valuable scholarly contribution. Through an analysis of performance indicators, evaluation methods, and communication analytics, the monograph highlights the necessity of systematically monitoring the outcomes of communication activities. Simultaneously, the discussion of intercultural communication aspects illustrates that successful global organizations must adapt their messages to diverse cultural, social, and institutional contexts (Franjić, 2022; Dašić, 2024; Stanković, 2025).

The final chapters address ethical issues in corporate communication, one of the most relevant topics in contemporary communication theory and practice. The author discusses questions of transparency, information accuracy, privacy protection, the responsible use of digital technologies, and the ethical application of artificial intelligence in communication processes. In doing so, the monograph moves beyond the traditional boundaries of communication management and creates space for a critical examination of organizational responsibility within contemporary digital society.

Taken as a whole, this second thematic section of the monograph provides a comprehensive overview of contemporary communication practices and the challenges organizations face in a global and digital environment. By combining theoretical discussions, practical examples, and contemporary trends, the author successfully demonstrates how corporate communications have become one of the key determinants of organizational competitiveness, sustainability, and social responsibility.

Media Relations, Crisis Communication, and the Digital Transformation of Corporate Communications

Within the second thematic section of the monograph, particular attention is devoted to media relations, crisis communication, and the digital transformation of corporate communications. These topics are addressed across several chapters and represent some of the most relevant areas of contemporary communication theory and practice. The author begins from the premise that media systems and communication technologies have significantly transformed the ways organizations communicate with their publics, manage information, and respond to crisis situations. In this context, corporate communications are presented not merely as instruments of information dissemination but also as mechanisms for building trust, preserving reputation, and managing organizational risks.

In discussing media relations, the author emphasizes that contemporary organizations can no longer regard the media solely as channels for transmitting information. The development of digital platforms, online journalism, and social media has created an environment in which information circulates rapidly and often beyond organizational control, while corporate reputation is subject to continuous public scrutiny. The monograph highlights the importance of establishing long-term and professional relationships with media organizations, as well as the necessity of transparent and timely communication. This perspective is consistent with contemporary scholarly views that regard media relations as a crucial component of strategic communication management and organizational credibility building (Macnamara, 2014).

A substantial portion of the monograph is devoted to crisis communication. The author provides a detailed analysis of the nature of organizational crises, their causes and consequences, and the communication strategies that organizations can employ to preserve public trust. Particular emphasis is placed on timely responses, the assumption of responsibility, the selection of appropriate communication channels, and the importance of well-prepared crisis management plans. These considerations are fully aligned with the Situational Crisis Communication Theory (SCCT), which suggests that the effectiveness of communication responses depends on both the nature of the crisis and the degree of responsibility attributed to the organization by the public (Coombs, 2007).

The third major component of this section focuses on the digital transformation of corporate communications. The author demonstrates that digitalization has introduced not only new technological tools but has fundamentally reshaped communication processes within organizations. Social media platforms, digital communication channels, analytical tools, mobile applications, and artificial intelligence-based systems have enabled more direct, interactive, and personalized communication with stakeholders. At the same time, organizations face new challenges, including the spread of misinformation, cybersecurity threats, privacy concerns, and growing public expectations regarding transparency and accountability.

A particularly valuable aspect of the analysis is the author's recognition that digital transformation should not be viewed solely as a technological process. Rather, it is presented as an organizational and communicative transformation that requires new competencies, new management approaches, and new forms of stakeholder interaction. This perspective demonstrates that contemporary corporate communications require the integration of traditional and digital communication channels, as well as continuous adaptation to an increasingly dynamic media environment.

The issues examined in this section confirm that media relations, crisis communication, and digital transformation constitute central themes of contemporary corporate communications. Through the systematic integration of theoretical approaches, relevant examples, and current communication trends, the author demonstrates how communication processes have become inseparable from the strategic management of organizations. This part of the monograph makes a particularly valuable contribution to understanding how organizations build and protect their reputations, manage crisis situations, and leverage the potential of digital technologies to strengthen relationships with their various publics.

Measuring Communication Effectiveness, Global Dimensions, and Ethical Challenges in the Contemporary Corporate Environment

The concluding chapters of the monograph Corporate Communications are devoted to topics that are gaining increasing importance in contemporary communication theory and practice: the measurement of communication effectiveness, the global dimensions of corporate communication, and the ethical challenges organizations face in the digital age. This thematic area represents a logical conclusion to the monograph because, after examining the theoretical foundations and practical applications of corporate communication, the author shifts attention to questions of effectiveness, internationalization, and social responsibility. In doing so, corporate communications are presented as a process that extends beyond the creation and dissemination of messages, encompassing the continuous evaluation of outcomes, the understanding of diverse cultural contexts, and adherence to ethical standards.

In the section dedicated to measuring communication effectiveness, the author analyzes various methods and indicators used to assess the success of communication activities. Particular attention is given to communication performance metrics, media visibility analysis, audience engagement assessment, reputation measurement, and the evaluation of return on communication investments. This analysis is especially valuable because contemporary organizations increasingly require measurable evidence of the outcomes generated by communication activities. For this reason, communication evaluation has become one of the central components of strategic communication management. Research demonstrates that organizations that systematically measure communication performance make better-informed decisions and more effectively align communication activities with organizational objectives (Volk, 2016).

Another important dimension of the analysis concerns the global aspects of corporate communications. The author points out that globalization and the internationalization of business activities require new approaches to communication management. Organizations today communicate simultaneously with diverse cultural, linguistic, political, and economic environments, necessitating a high degree of adaptability in communication strategies. The monograph effectively demonstrates that universal communication models are not always applicable across different cultural contexts and that understanding intercultural differences is a prerequisite for successful global communication. Contemporary research confirms that cultural sensitivity is one of the most significant determinants of effective communication in international environments and successful stakeholder relationship management on a global scale (Tench & Moreno, 2015).

Through the analysis of ethical issues in corporate communication, the author addresses topics such as truthfulness and transparency of information, privacy protection, responsibility toward the public, information manipulation, and the ethical use of contemporary digital technologies. Particularly relevant are the discussions concerning the application of artificial intelligence, algorithmic information management, and organizational responsibility in an increasingly digitally dependent society. The monograph emphasizes that communication ethics is not merely a normative concern but also a strategic prerequisite for building trust, credibility, and long-term organizational reputation.

The significance of this section is further reflected in the author's ability to integrate communication measurement, global communication challenges, and ethical standards into a unified analytical framework. In doing so, the monograph demonstrates that the success of corporate communications cannot be evaluated solely through quantitative indicators but must also be assessed through an organization's ability to communicate responsibly with diverse publics and adapt its communication practices to a complex international environment.

Considering all of the issues discussed throughout the monograph, it becomes evident that contemporary corporate communications occupy a central position within ongoing organizational, technological, and societal transformations. By integrating theoretical concepts, contemporary communication practices, and ethical dimensions of communication management, the author successfully develops a coherent concluding framework for the monograph. At the same time, the author highlights the fact that the future development of corporate communication will largely depend on the ability of organizations to respond to the demands of the global digital environment, maintain public trust, and ensure the ethical and socially responsible application of communication technolo-gies.

Conclusion

The scientific monograph Corporate Communications by Professor Dejan Dašić, PhD, represents a comprehensive, systematic, and scientifically grounded work that significantly enriches the domestic body of literature in the field of corporate communication. Through eleven thematically interconnected chapters, the author successfully integrates theoretical concepts, contemporary communication models, practical experiences, and the current challenges faced by organizations in the context of digital transformation and globalization.

A particular strength of the monograph lies in its interdisciplinary approach. Corporate communications are not examined solely as a function of public relations or marketing, but rather as a strategic management discipline that integrates organizational culture, corporate identity, reputation, stakeholder management, corporate social responsibility, and ethical business practices. The author convincingly demonstrates that communication has become one of the most important resources of contemporary organizations and a critical factor influencing their competitiveness, sustainability, and social legitimacy.

The monograph is characterized by a clear structure, logical organization of content, and a balanced integration of theoretical discussion and practical application. Of particular importance is the inclusion of topics that occupy a central position in contemporary academic and professional debates, including digital communications, crisis communication, communication effectiveness measurement, intercultural communication, and the ethical implications of emerging technologies.

The scholarly contribution of this monograph is reflected in its systematic synthesis of contemporary knowledge in the field of corporate communications, while its practical significance lies in the applicability of the presented concepts for managers, public relations professionals, communication consultants, researchers, and students. Consequently, it may be concluded that Corporate Communications represents a valuable scholarly and educational resource with the potential to become one of the leading reference publications in the field of corporate communication within the Serbian-speaking academic and professional community.

The work of Professor Dejan Dašić, PhD, confirms that corporate communications today represent far more than a mechanism for the transmission of information. Rather, they constitute a strategic instrument through which organizations build identity, cultivate trust, shape reputation, and establish long-term relationships with their stakeholders. It is precisely in this capacity that the enduring scholarly and practical value of this monograph resides.

References

Argenti, P. A. (2017). Strategic communication in the C-Suite. International Journal of Business Communication, 54(2), 146–160. https://doi.org/10.1177/2329488416687053

Balmer, J. M. T. (2017). The corporate identity, total corporate communications, stakeholders' attributed identities, identifications and behaviours continuum. European Journal of Marketing, 51(9/10), 1472–1502. https://doi.org/10.1108/EJM-07-2017-0448

Coombs, W. T. (2007). Protecting organization reputations during a crisis: The development and application of situational crisis communication theory. Corporate Reputation Review, 10(3), 163–176. https://doi.org/10.1057/palgrave.crr.1550049

Cornelissen, J. P., & Elving, W. J. L. (2003). Managing corporate identity: An integrative framework of dimensions and determinants. Corporate Communications: An International Journal, 8(2), 114–120. https://doi.org/10.1108/1356328031047553

Dašić, D. (2018). Glasine kao vid simboličke moći – mediji između istine i manipulacije. Nacionalni interes, 32(2), 61–80. https://doi.org/10.22182/ni.3222018.4

Dašić, D. (2024). Interconnection between product quality, consumer perception, and country of origin influence. Srpska Akademska Misao, 9(1), 52–61. https://www.sam.edu.rs/index.php/sam/article/view/67

Dašić, D. (2026a). Korporativne komunikacije. Visoka škola strukovnih studija BIZNIS, Niš.

Dašić, D. (2026b). Strategic management of sports organizations in the context of digital transformation: A theoretical framework and implications for sports marketing. Management Horizons, 6(1), 89–106. https://hm.edu.rs/index.php/hm/article/view/58

Dašić, D., Vitković, B., & Borojević, K. (2024). The role of communication management in the development of rural areas. Ekonomika poljoprivrede, 71(4), 1421–1435. https://doi.org/10.59267/ekoPolj24041421D

Forman, J., & Argenti, P. A. (2005). How corporate communication influences strategy implementation, reputation and the corporate brand: An exploratory qualitative study. Corporate Reputation Review, 8(3), 245–264. https://doi.org/10.1057/palgrave.crr.1540253

Franjić, S. (2022). Internet and modern information technology in the function of society development. Management Horizons, 2(1). https://hm.edu.rs/index.php/hm/article/view/32

Garača, N., Ratković, M., & Raletić, S. (2013). Achieving competition advancement through communication. Informatologia, 46(4), 361–371. https://hrcak.srce.hr/113096

Jotanović, S. R., Ratković, M., & Zakić, N. (2017). Pro-environmental activities of consumers. Polish Journal of Management Studies, 16(1), 55–66. https://doi.org/10.17512/pjms.2017.16.1.05

Karanges, E., Johnston, K., Beatson, A., & Lings, I. (2015). The influence of internal communication on employee engagement: A pilot study. Public Relations Review, 41(1), 129–131. https://doi.org/10.1016/j.pubrev.2014.12.003

Lunić, T., & Ćesarević, J. (2025). Artificial intelligence and the future of planet. Management Horizons, 5(1), 93–111. https://hm.edu.rs/index.php/hm/article/view/8

Macnamara, J. (2014). Emerging international standards for measurement and evaluation of public relations: A critical analysis. Public Relations Inquiry, 3(1), 7–29. https://doi.org/10.1177/2046147X14521199

Ratković, M., Grubić, G., & Tasić, S. (2011). Dobri odnosi sa kupcima kao faktor konkurentne prednosti. In Proceedings: Plenarna saopštenja (pp. 180–186). Istraživački centar za upravljanje kvalitetom i pouzdanošću – DQM, Čačak.

Ratković, M., Grubić, G., & Tasić, S. (2012). Evolution of marketing: From product up to employment. International Journal of Economics and Law, 2(5), 72–78.

Ratković, M., Pavlović, M., & Anđelković, M. (2017). Comparative analysis of customer satisfaction in postal and banking services. International Review, 1–2, 108–120. https://doi.org/10.5937/intrev1702108R

Stanković, M. (2025). Contemporary challenges and interdisciplinary approaches in sport: A review of the SPORTICOPEDIA SMB 2024 proceedings. Srpska Akademska Misao, 10(1), 95–102. https://www.sam.edu.rs/index.php/sam/article/view/88

Tench, R., & Moreno, Á. (2015). Mapping communication management competencies for European practitioners: ECOPSI an EU study. Journal of Communication Management, 19(1), 39–61. https://doi.org/10.1108/JCOM-11-2013-0084

Vitković, B., Dašić, D., Kostadinović, G., & Ilievski Kostadinović, M. (2026). Digital communication platforms for institutional branding: A conceptual review of learning, digital literacy, and AI/ML integration. International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE), 14(1), 125–133. https://doi.org/10.23947/2334-8496-2026-14-1-125-133

Volk, S. C. (2016). Toward a theory of communication evaluation: Perspectives from the strategic communication field. International Journal of Strategic Communication, 10(1), 61–74. https://doi.org/10.1080/1553118X.2015.1075497

Zerfass, A., Verčič, D., Nothhaft, H., & Werder, K. P. (2018). Strategic communication: Defining the field and its contribution to research and practice. International Journal of Strategic Communication, 12(4), 487–505. https://doi.org/10.1080/1553118X.2018.149348

KRITIČKI OSVRT NA NAUČNU MONOGRAFIJU „KORPORATIVNE KOMUNIKACIJE": TEORIJSKI OKVIRI, SAVREMENI KOMUNIKACIONI IZAZOVI I PRAKTIČNE IMPLIKACIJE ZA UPRAVLJANJE ORGANIZAIONIM KOMUNIKACIJAMA

Sažetak: Predmet ovog rada je kritički osvrt na naučnu monografiju *Korporativne komunikacije* autora dr Dejana Dašića, koja predstavlja sveobuhvatno i sistematično naučno delo posvećeno proučavanju korporativnog komuniciranja kao jedne od ključnih funkcija savremenog menadžmenta. U monografiji se analiziraju teorijski osnovi, modeli, strategije i instrumenti korporativnih komunikacija, sa posebnim osvrtom na ulogu komunikacije u izgradnji korporativnog identiteta, reputacije i odnosa sa zainteresovanim stranama. Autor razmatra značaj interne i eksterne komunikacije, upravljanje kriznim situacijama, odnose s medijima, digitalnu transformaciju komunikacionih procesa, kao i savremene izazove koje donose nove informaciono-komunikacione tehnologije. Monografija se odlikuje interdisciplinarnim pristupom koji uspešno povezuje teorijske koncepte sa praktičnim primerima iz poslovne prakse. Njena posebna vrednost ogleda se u doprinosu unapređenju naučnih saznanja iz oblasti korporativnih komunikacija, kao i u njenoj primenljivosti u akademskom obrazovanju, istraživačkom radu i profesionalnoj praksi. Stoga se monografija može posmatrati kao značajan doprinos razumevanju savremenih komunikacionih procesa u organizacijama i njihove uloge u ostvarivanju strateških ciljeva.

Ključne reči: korporativne komunikacije, korporativni identitet, korporativna reputacija, komunikacioni menadžment, zainteresovane strane

Ekonomski signali, 2026, 21 (1): 129-142
UDK: 657.05
005.51
DOI: 10.5937/ekonsig2601129K

DEVELOPMENT AND CONTEMPORARY CHALLENGES OF FINANCIAL REPORTING IN THE CONTEXT OF GLOBALIZATION

Gruja Kostadinović[1], Marija Ilievska Kostadinović[2],
[1,2] Faculty of Business and Law, MB Univerzitet, Belgrade

[1] gruja.kostadinovic@konstantinveliki.edu.rs, https://orcid.org/0000-0002-6049-0916
[2] marija.kostadinovic@konstantinveliki.edu.rs, http://orcid.org/0000-0002-6049-0916

Received: 13.2.2026; Prihvaćeno: 15.5.2026.
Review Article
Coresponding: gruja.kostadinovic@fpp.edu.rs

Abstracts: Financial reporting represents one of the key instruments of modern business and corporate governance, as it enables transparent and reliable communication of financial position and performance to investors, creditors, regulatory institutions, and other stakeholders. The aim of this paper is to analyze the development of financial reporting and identify the most significant challenges it faces in the context of globalization. Particular attention is devoted to the process of international harmonization of accounting standards, the role of International Financial Reporting Standards (IFRS) in improving the quality of financial information, and the impact of the institutional environment on the effectiveness of their implementation. The analysis of relevant scientific literature indicates that the harmonization of financial reporting contributes to greater comparability, transparency, and reliability of financial statements; however, its effects depend on the quality of regulatory oversight, the development of capital markets, and the professional competencies of participants in the reporting process. The paper also examines contemporary challenges arising from digital transformation, the automation of accounting processes, the growing importance of non-financial and ESG reporting, and increasing demands for corporate transparency. The findings suggest that the future development of financial reporting requires the integration of financial and non-financial information, the continuous improvement of regulatory frameworks, and adaptation to technological changes shaping the global business environment.

Keywords: financial reporting, globalization, IFRS, accounting harmonization, business transparency

Introduction

Financial reporting represents a central area of accounting and has been the subject of continuous interest among both academic researchers and professional practitioners. The globalization of business activities, the harmonization of accounting standards, increasing demands from investors and regulatory bodies, as well as the growing importance of transparency and information quality (Dašić et al., 2023), have contributed to the intensive development of scientific literature in this field (Dašić, Dašić, & Trklja, 2021).

Financial reporting is one of the key elements of modern business and corporate governance, as it enables various stakeholder groups to access relevant information regarding the financial position, performance, and prospects of business entities (Kostadinović & Ilievska Kostadinović, 2026). In the context of intensive globalization, the development of international financial markets, and the increasing mobility of capital, the need for transparent, comparable, and reliable financial information has become more important than ever before. Investors, creditors, regulatory authorities, and other users of financial statements require a high level of reporting quality to make rational economic decisions within a complex international business environment (Milojević & Milanović, 2025).

The process of globalization has significantly influenced the development of the accounting profession and financial reporting practices. The expansion of multinational corporations, the growth of international investments, and the integration of financial markets have created a need for the harmonization of accounting standards on a global scale. Traditional national accounting systems often differed in their approaches to the recognition, measurement, and disclosure of financial information, thereby limiting the comparability of financial statements across countries. For this reason, the International Financial Reporting Standards (IFRS) were developed with the objective of establishing a common language of financial reporting that would facilitate more effective communication among participants in global capital markets (Ball, 2006).

The importance of international harmonization in financial reporting lies in the fact that high-quality and comparable financial information helps reduce information asymmetries between companies and investors. Empirical studies indicate that the adoption of international accounting standards can improve the quality of financial reporting through increased relevance of accounting information, reduced opportunities for earnings manipulation, and enhanced business transparency (Kostadinović & Ilievska Kostadinović, 2025; Dašić, 2025). Barth, Landsman, and Lang (2008) argue that companies applying international accounting standards often exhibit a higher level of accounting quality compared to firms operating solely under national standards, further emphasizing the significance of international standardization.

However, despite its numerous advantages, the process of harmonizing financial reporting is not without challenges. The implementation of IFRS in different institutional, economic, and legal environments has demonstrated that the formal adoption of standards does not automatically guarantee their consistent application in practice. Numerous factors, including the regulatory framework, audit quality, capital market development, and the professional competencies of accountants, influence the ultimate outcomes of international standardization. Brüggemann, Hitz, and Sellhorn (2013) emphasize that mandatory IFRS adoption may generate both intended and unintended consequences, with the effects of standardization depending substantially on the specific institutional context of each country.

Contemporary challenges in financial reporting have been further intensified by digitalization, technological innovation, and the increasing demand for non-financial information. Users of financial reports today expect not only information on financial performance but also data related to business sustainability, corporate social responsibility, risk management, and corporate governance. At the same time, digital technologies are transforming the collection, processing, and presentation of financial data, requiring continuous adaptation of regulatory and professional frameworks. Moreover, the transition to international standards often represents a complex organizational process that demands substantial resources, employee training, and modifications to information systems. Weaver and Woods (2015) point out that organizations frequently encounter numerous operational, technical, and human resource challenges during the transition to IFRS, highlighting the complexity of contemporary financial reporting.

Based on the foregoing considerations, the aim of this paper is to analyze the development of financial reporting and identify the key challenges faced by organizations in the era of globalization. Particular attention is devoted to the process of international harmonization of accounting standards, the role of IFRS in enhancing the quality of financial reporting, and the contemporary challenges arising from digital transformation, regulatory changes, and increasing demands for business transparency (Vukša, Milojević, & Mihajlović, 2024; Pušonja, 2025).

Development and International Harmonization of Financial Reporting

The development of financial reporting represents a long-term process shaped by changes in the economic environment, the evolution of market institutions, and the growing needs of users of financial information. From its origins as a system primarily intended for internal business control, financial reporting has evolved into a complex communication mechanism between business entities and various stakeholder groups. Contemporary financial statements are no longer merely a collection of accounting data; rather, they serve as a key instrument for assessing the financial position, performance, and future prospects of companies.

During the early twentieth century, accounting systems developed predominantly at the national level, with the economic, legal, and cultural characteristics of individual countries shaping different approaches to financial reporting. This situation did not present a significant problem until business operations began to transcend national borders. The intensification of international trade, the growth of foreign direct investment, and the development of global financial markets created a need for greater comparability of financial information across countries. Differences among national accounting standards often made it difficult for investors to assess the financial performance of companies operating in different jurisdictions, thereby increasing information asymmetry and transaction costs.

In response to these challenges, the process of international harmonization of financial reporting was initiated. Its primary objective was to establish common accounting principles that would enhance the transparency, comparability, and reliability of financial statements. A particularly important role in this process was played by the establishment of the International Accounting Standards Committee (IASC) and, subsequently, the International Accounting Standards Board (IASB), which assumed a leading role in the development of the International Financial Reporting Standards (IFRS). The introduction of IFRS represented one of the most significant reforms in the history of accounting, as it created, for the first time, a framework that enabled relatively uniform financial reporting on a global scale.

The importance of financial reporting harmonization is especially evident in the context of capital globalization. Investors today have opportunities to invest in companies worldwide, making the quality and comparability of financial information crucial for investment decision-making. Daske, Hail, Leuz, and Verdi (2008) argue that mandatory IFRS adoption can contribute to increased market liquidity and lower costs of capital, thereby improving the efficiency of capital markets. Their findings suggest that the benefits of international harmonization extend beyond the accounting profession, generating broader economic effects that influence the functioning of financial markets and overall economic development.

However, the harmonization of financial reporting does not automatically guarantee the same level of financial reporting quality across countries. The quality of financial reporting depends on numerous institutional factors, including the legal system, the level of investor protection, the effectiveness of regulatory institutions, and the development of capital markets. Soderstrom and Sun (2007) emphasize that IFRS adoption alone cannot eliminate differences among national systems because the quality of financial statements is influenced by the broader institutional environment in which companies operate. In other words, international standards represent a necessary, but not sufficient, condition for achieving high-quality financial reporting.

Additional evidence supporting the importance of international harmonization is provided by studies examining the behavior of international investors following IFRS adoption. DeFond, Hu, Hung, and Li (2011) found that the increased comparability of financial statements resulting from mandatory IFRS implementation contributed to higher levels of foreign investment and greater interest from international investment funds in companies operating in countries with credible enforcement of accounting standards. These findings confirm that financial reporting harmonization has a direct impact on attracting international capital and promoting the integration of global financial markets.

Nevertheless, the experiences of different countries indicate that the effects of international standardization are not uniform across organizations. Daske, Hail, Leuz, and Verdi (2013) highlight significant differences in the ways companies implement IFRS. While some organizations adopt the standards as part of a broader strategy aimed at improving transparency and corporate governance, others implement them primarily to comply formally with regulatory requirements. Consequently, the outcomes of harmonization vary depending on the degree of genuine commitment to high-quality financial reporting.

It can be concluded that the development of financial reporting is a continuous process of adaptation to changes in the global economic environment. International harmonization, primarily embodied through IFRS, has significantly contributed to enhancing the transparency, comparability, and usefulness of financial information. Nevertheless, the success of harmonization depends not only on the quality of the standards themselves but also on the institutional environment, regulatory mechanisms, and the willingness of organizations to consistently apply the principles of transparency in business practice.

Contemporary Challenges of Financial Reporting in the Context of Globalization

The globalization of economic activities, the internationalization of business operations, and the development of modern information technologies (Vladisavljević et al., 2023; Trklja, Dašić, B., & Trklja, 2024) have significantly transformed the environment in which financial reporting operates. Contemporary companies conduct business across multiple markets simultaneously, attract capital from various countries, and face increasing demands from investors, regulatory authorities, and other stakeholder groups. Under such circumstances, financial reporting is no longer merely a legal obligation but has become a strategic instrument of corporate transparency and market communication.

One of the most important challenges of contemporary financial reporting relates to the consistent implementation of international accounting standards. Although the adoption of IFRS has significantly improved the comparability of financial statements, research indicates that the effects of their implementation are not uniform across countries. Christensen, Hail, and Leuz (2013) emphasize that the benefits of IFRS adoption largely depend on the quality of regulatory oversight and the effectiveness of enforcement mechanisms. Their analysis demonstrates that positive effects on market liquidity and transparency occur primarily in countries that have simultaneously strengthened their financial reporting supervision and enforcement systems alongside IFRS adoption.

In addition to regulatory challenges, significant difficulties arise from the diverse institutional environments in which companies operate. National legal systems, corporate governance traditions, tax regulations, and the level of capital market development influence the interpretation and application of accounting standards. Pope and McLeay (2011) argue that the outcomes of IFRS implementation across Europe have not been uniform but have instead depended on local institutional characteristics, the quality of oversight, and the professional competencies of participants in the financial reporting process. Such differences represent one of the key challenges of global accounting harmonization, as the formal application of the same standards does not necessarily guarantee identical accounting outcomes.

Contemporary financial reporting also faces the challenge of ensuring a high quality of accounting information. The quality of financial statements depends not only on accounting standards but also on the incentives faced by managers, owners, and other stakeholder groups. Christensen, Lee, Walker, and Zeng (2015) indicate that institutional incentives, corporate governance systems, and the regulatory environment often exert a greater influence on the quality of financial information than accounting standards themselves. Their findings confirm that improving the quality of financial reporting requires the simultaneous development of professional standards, regulatory mechanisms, and a corporate culture of transparency.

Another important challenge stems from the need to align international standards with the growing market demand for timely and comprehensive information. Investors today expect not only traditional financial indicators but also information regarding business sustainability, risk management, digital transformation, and long-term strategic development. Consequently, financial reporting is increasingly integrated with non-financial and ESG reporting, thereby expanding the scope of information that companies are expected to disclose.

Issues related to the supervision and enforcement of accounting standards have gained particular importance in contemporary business environments. Barth and Israeli (2013) emphasize that the benefits of international standards cannot be viewed independently of the institutional settings in which they are applied. Their analysis demonstrates that the most significant positive effects emerge when IFRS adoption is accompanied by effective regulatory oversight and consistent enforcement of accounting rules. In such circumstances, financial reporting becomes a reliable mechanism for reducing information asymmetries and strengthening investor confidence.

The analysis of contemporary literature indicates that financial reporting is currently influenced by global economic, regulatory, and technological changes that extend far beyond the traditional boundaries of accounting practice. The quality of financial information depends not only on the application of international accounting standards but also on the effectiveness of institutional frameworks, the quality of regulatory oversight, the professional competencies of reporting participants, and the ability of organizations to respond to increasingly complex market demands. In the era of globalization, successful financial reporting requires continuous adaptation to changes in the economic, technological, and regulatory environment while preserving the fundamental principles of reliability, comparability, objectivity, and relevance of financial information.

A particularly significant challenge is the accelerated digital transformation of business operations, which is reshaping traditional processes of collecting, processing, and presenting financial data. The development of information systems, artificial intelligence, the automation of accounting procedures, and the application of advanced analytical tools contribute to greater efficiency in financial reporting. At the same time, however, they raise new concerns regarding data security, information protection, and the reliability of digital records. Organizations are therefore confronted with the need to balance technological innovation with the preservation of the integrity of financial information that serves as the basis for business and investment decision-making.

Furthermore, contemporary trends point to the increasing importance of integrated and non-financial reporting. Investors, regulators, and the broader public increasingly demand information that goes beyond traditional financial indicators. Issues such as business sustainability, risk management, corporate social responsibility, and corporate governance have become integral components of reporting processes and the assessment of a company's long-term value (Dašić, Kostadinović, & Kostadinović, 2022; Mladenović, 2024). Consequently, the future development of financial reporting cannot be viewed solely through the lens of accounting standards but rather as a multidisciplinary process aimed at providing comprehensive, transparent, and timely information that meets the needs of the modern global marketplace.

Conclusion

Financial reporting represents one of the most important mechanisms of modern business, as it enables the transparent presentation of the financial position, performance, and development prospects of business entities to various stakeholder groups. The development of the global economy, the intensification of international investment flows, and the increasing integration of financial markets have transformed traditional accounting into a complex system of international financial communication. Under such circumstances, the quality, reliability, and comparability of financial information have become essential prerequisites for the efficient functioning of global capital markets and for informed economic decision-making.

The analysis of the development of financial reporting demonstrates that the process of international harmonization of accounting standards has been one of the most significant steps in the modernization of the accounting profession. The introduction of International Financial Reporting Standards (IFRS) has enabled the creation of a common framework for the preparation and presentation of financial statements, thereby enhancing their international comparability and transparency. Numerous studies confirm that the application of international standards contributes to reducing information asymmetries between companies and investors, increasing market participants' confidence, and improving the efficiency of capital allocation. At the same time, the harmonization of financial reporting serves as an important mechanism supporting international investment and the further integration of global financial markets.

However, the findings indicate that the formal adoption of international accounting standards alone is not sufficient to ensure high-quality financial reporting. The effectiveness of harmonization depends significantly on the institutional environment, the quality of regulatory oversight, the efficiency of corporate governance systems, and the professional competencies of accountants and auditors. Consequently, the quality of financial information cannot be assessed solely through the lens of accounting standards but should instead be viewed as the outcome of interactions among numerous economic, legal, and organizational factors. This reality represents one of the most significant challenges facing contemporary financial reporting in a globalized business environment.

Particularly important in the modern era are the processes of digital transformation, which are reshaping traditional methods of collecting, processing, and presenting financial data. The development of information technologies, the automation of accounting procedures, the application of artificial intelligence, and the use of advanced analytical tools contribute to greater efficiency and accessibility of financial information. At the same time, digitalization raises new concerns regarding data security, cybersecurity risks, the protection of confidential information, and the reliability of digital records. Organizations are therefore required to continuously improve their information systems and internal control mechanisms in order to preserve the integrity and credibility of financial reporting.

An additional challenge arises from changing expectations among investors, regulatory authorities, and society as a whole. Contemporary users of financial reports increasingly demand information that extends beyond traditional financial indicators and encompasses issues such as business sustainability, risk management, corporate governance, social responsibility, and environmental protection. As a result, financial reporting is gradually evolving into a broader concept of corporate reporting, in which financial and non-financial information collectively contribute to a more comprehensive assessment of long-term corporate value and sustainability. These developments require the adaptation of existing regulatory frameworks and the development of new reporting models capable of meeting the needs of modern markets.

Based on the conducted analysis, it can be concluded that the future development of financial reporting will largely depend on the ability of organizations, regulatory institutions, and the professional community to address the challenges posed by globalization, digitalization, and growing demands for business transparency. International Financial Reporting Standards will continue to serve as the foundation of global accounting harmonization; however, their effectiveness will depend on the quality of the institutional environment and the efficiency of their practical implementation. In this context, financial reporting will continue to play a crucial role in strengthening investor confidence, enhancing corporate accountability, and supporting the sustainable development of modern organizations in an environment characterized by increasingly dynamic global economic change.

References

Ball, R. (2006). International Financial Reporting Standards (IFRS): Pros and cons for investors. Accounting and Business Research, 36(sup1), 5–27. https://doi.org/10.1080/00014788.2006.9730040

Barth, M. E., & Israeli, D. (2013). Disentangling Mandatory IFRS Reporting and Changes in Enforcement. Journal of Accounting and Economics, 56(2–3), 178–188. https://doi.org/10.1016/j.jacceco.2013.11.002

Barth, M. E., Landsman, W. R., & Lang, M. H. (2008). International accounting standards and accounting quality. Journal of Accounting Research, 46(3), 467–498. https://doi.org/10.1111/j.1475-679X.2008.00287.x

Brüggemann, U., Hitz, J. M., & Sellhorn, T. (2013). Intended and unintended consequences of mandatory IFRS adoption: A review of extant evidence and suggestions for future research. European Accounting Review, 22(1), 1–37. https://doi.org/10.1080/09638180.2012.718487

Christensen, H. B., Hail, L., & Leuz, C. (2013). Mandatory IFRS Reporting and Changes in Enforcement. Journal of Accounting and Economics, 56(2–3), 147–177. https://doi.org/10.1016/j.jacceco.2013.10.007

Christensen, H. B., Lee, E., Walker, M., & Zeng, C. (2015). Incentives or Standards: What Determines Accounting Quality Changes around IFRS Adoption? European Accounting Review, 24(1), 31–61. https://doi.org/10.1080/09638180.2015.1009144

Daske, H., Hail, L., Leuz, C., & Verdi, R. (2008). Mandatory IFRS Reporting around the World: Early Evidence on the Economic Consequences. Journal of Accounting Research, 46(5), 1085–1142. https://doi.org/10.1111/j.1475-679X.2008.00306.x

Daske, H., Hail, L., Leuz, C., & Verdi, R. (2013). Adopting a Label: Heterogeneity in the Economic Consequences Around IAS/IFRS

Adoptions. Journal of Accounting Research, 51(3), 495–547. https://doi.org/10.1111/1475-679X.12005

Dašić, B. (2025). Analysis of public finance management reform within the comprehensive public administration reform. Management Horizons, 5(1), 55–71. https://hm.edu.rs/index.php/hm/article/view/6

Dašić, B., Dašić, D., & Trklja, R. (2021). Informal employment as a form of gray economy in the time of COVID-19 pandemics. In N. Koropanovski (Ed.), Dani Arčibalda Rajsa (pp. 439–452). University of Criminal Investigation and Police Studies. https://eskup.kpu.edu.rs/dar/issue/view/6/4

Dašić, B., Kostadinović, S., & Kostadinović, I. (2022). Shadow economy in Serbia in the time of COVID-19 pandemic. Management Horizons, 2(1). https://hm.edu.rs/index.php/hm/article/view/31

Dašić, D., Vučić, V., Turčinović, Ž., & Tošić, M. (2023). Digital marketing - marketing opportunities and the power of virtual consumers. Economics of Agriculture, 70(4), 1187–1199. https://doi.org/10.59267/ekoPolj23041187D

DeFond, M. L., Hu, X., Hung, M., & Li, S. (2011). The impact of mandatory IFRS adoption on foreign mutual fund ownership: The role of comparability. Journal of Accounting and Economics, 51(3), 240–258. https://doi.org/10.1016/j.jacceco.2011.02.001

Kostadinović, G., & Ilievska Kostadinović, M. (2025). Integration of TQM and financial management: Impact on profitability and risk. Management Horizons, 5(1), 113–125. https://hm.edu.rs/index.php/hm/article/view/9

Kostadinović, G., & Ilievska Kostadinović, M. (2026). The role of financial forensics in the prevention and detection of money laundering. Management Horizons, 6(1), 123–137. https://hm.edu.rs/index.php/hm/article/view/60

Milojević, I., & Milanović, A. (2025). Accounting analysis of the financial position of company. Management Horizons, 5(1), 11–24. https://hm.edu.rs/index.php/hm/article/view/4

Mladenović, S. (2024). Public management and modernization of the public sector. Management Horizons, 4(1). https://hm.edu.rs/index.php/hm/article/view/20

Pope, P. F., & McLeay, S. J. (2011). The European IFRS Experiment: Objectives, research challenges and some early evidence. Accounting and Business Research, 41(3), 233–266. https://doi.org/10.1080/00014788.2011.575002

Pušonja, B. (2025). Comparative analysis of public budget revenues of the Republic of Serbia for 2024 and 2025. Srpska Akademska Misao, 10(1), 27–33. https://www.sam.edu.rs/index.php/sam/article/view/84

Soderstrom, N. S., & Sun, K. J. (2007). IFRS adoption and accounting quality: A review. European Accounting Review, 16(4), 675–702. https://doi.org/10.1080/09638180701706732

Trklja, R., Dašić, B., & Trklja, M. (2024). Accounting inclusion of electronic invoices in public and private entities of the Republic of Serbia. Srpska Akademska Misao, 9(1), 35–44. https://www.sam.edu.rs/index.php/sam/article/view/65

Vladisavljević, V., Milenković, N., & Radosavljević, M. (2023). Development of electronic payment systems in countries in transition. Srpska Akademska Misao, 8(1), 107–116. https://www.sam.edu.rs/index.php/sam/article/view/60

Vukša, S., Milojević, I., & Mihajlović, M. (2024). The place and role of fiscal policy in contemporary economies. Srpska Akademska Misao, 9(1), 7–18. https://www.sam.edu.rs/index.php/sam/article/view/63

Weaver, L., & Woods, M. (2015). The challenges faced by reporting entities on their transition to International Financial Reporting Standards: A qualitative study. Accounting in Europe, 12(2), 197–221. https://doi.org/10.1080/17449480.2015.1103376

RAZVOJ I SAVREMENI IZAZOVI FINANSIJSKOG IZVEŠTAVANJA U USLOVIMA GLOBALIZACIJE

Sažetak: Finansijsko izveštavanje predstavlja jedan od ključnih instrumenata savremenog poslovanja i korporativnog upravljanja, budući da omogućava transparentno i pouzdano informisanje investitora, kreditora, regulatornih institucija i drugih zainteresovanih strana o finansijskom položaju i uspešnosti poslovnih subjekata. Cilj rada je analiza razvoja finansijskog izveštavanja i identifikovanje najznačajnijih izazova sa kojima se ono suočava u uslovima globalizacije. Posebna pažnja posvećena je procesu međunarodne harmonizacije računovodstvenih standarda, ulozi Međunarodnih standarda finansijskog izveštavanja (IFRS) u unapređenju kvaliteta finansijskih informacija, kao i uticaju institucionalnog okruženja na efikasnost njihove primene. Analiza relevantne naučne literature ukazuje da harmonizacija finansijskog izveštavanja doprinosi većoj uporedivosti, transparentnosti i pouzdanosti finansijskih izveštaja, ali da njeni efekti zavise od kvaliteta regulatornog nadzora, razvijenosti tržišta kapitala i profesionalnih kompetencija učesnika u procesu izveštavanja. U radu su takođe razmotreni savremeni izazovi koji proizlaze iz digitalne transformacije, automatizacije računovodstvenih procesa, rastućeg značaja nefinansijskog i ESG izveštavanja, kao i povećanih zahteva za korporativnom transparentnošću. Rezultati analize ukazuju da budući razvoj finansijskog izveštavanja podrazumeva integraciju finansijskih i nefinansijskih informacija, kontinuirano unapređenje regulatornih okvira i prilagođavanje tehnološkim promenama koje oblikuju globalno poslovno okruženje.

Ključne reči: finansijsko izveštavanje, globalizacija, IFRS, harmonizacija računovodstva, transparentnost poslovanja

Ekonomski signali, 2026, 21 (1): 143-164
UDK: 336.7:004
DOI: 10.5937/ekonsig2601143S

THE DIGITAL EURO AND CENTRAL BANK DIGITAL CURRENCIES (CBDCs): CHALLENGES FOR MONETARY POLICY, FINANCIAL STABILITY, AND THE FUTURE OF PAYMENT SYSTEMS

Boris Siljković [1], Anđela Raičković [2], Enis Ujkanović [3]
[1] Academy of Applied Studies Kosovo and Metohija, Department Pec in Leposavic,
[2] Finance Plus DOO, Podgorica,
[3] University of Novi Pazar, Department of Economic and Computer Sciences, Novi Pazar

[1] boris_siljkovic@yahoo.com, http: //orcid.org 0000-0002-8548-4731
[2] andjela.raickovic@financeplus.me, http: //orcid.org/0009-0002-7798-4928
[3] e.ujkanovic@uninp.edu.rs, https://orcid.org/0009-0005-4302-4402

Received: 10.1.2026; Prihvaćeno: 25.5.2026.
Review Article
Coresponding: boris_siljkovic@yahoo.com

Abstracts: The digital transformation of the financial system in recent years has prompted central banks worldwide to intensify their research and development of Central Bank Digital Currencies (CBDCs). Among the most prominent initiatives is the digital euro project, which represents a response to the rapid proliferation of digital payment methods, the rise of private digital currencies, and the imperative to preserve monetary sovereignty and financial stability. The subject of this research is the analysis of the digital euro concept and its potential economic and institutional implications. The study aims to examine the prospective effects of introducing the digital euro on the implementation of monetary policy, the operations of the banking sector, the efficiency of payment systems, and the stability of the financial system. Furthermore, it addresses the challenges this form of currency may pose to non-eurozone countries, with a particular focus on Serbia. The methodology applied in this research encompasses a content analysis of relevant domestic and international scientific literature, the comparative method, institutional analysis, and descriptive statistics based on available data from international financial institutions. The research findings indicate that the digital euro can enhance the security, accessibility, and efficiency of payment systems, increase the resilience of the monetary system, and stimulate innovation within the financial sector. Concurrently, its implementation raises critical concerns regarding user privacy protection, the potential disintermediation and reduction of the commercial bank deposit base, cybersecurity risks, and the adaptation of the regulatory framework. The scientific contribution of this paper lies in its critical analysis of contemporary approaches to CBDC development and its comparative assessment of the digital euro's potential implications on the financial systems of countries undergoing the European integration process, with a specific emphasis on Serbia and the Western Balkans.

Keywords: digital euro, central bank digital currency (CBDC), monetary policy, financial stability, banking sector, payment systems

Introduction

The digitalization of the financial sector represents one of the most significant transformation processes in contemporary economies. The development of information and communication technologies, the accelerated adoption of digital solutions, and changing consumer habits in financial services have led to a gradual shift away from traditional forms of cash payments toward the more intensive use of electronic and mobile payment instruments. Concurrently, the emergence of private digital currencies - particularly cryptocurrencies and stablecoins - has raised new questions regarding the preservation of monetary sovereignty, the efficiency of payment systems, and the capacity of central banks to maintain their pivotal role in currency issuance and the implementation of monetary policy (Kostadinović, Ilievska Kostadinović, 2026).

Under these circumstances, numerous central banks have launched research and development projects aimed at creating Central Bank Digital Currencies (CBDCs). Unlike decentralized cryptocurrencies, which operate without a central issuer and are often characterized by high price volatility, a CBDC represents a digital form of official fiat money issued by a central bank, retaining its status as legal tender. This approach seeks to merge the technological efficiency of digital payments with the public trust traditionally placed in central banks. The digital euro project has attracted particular attention within academic and professional circles; it is being developed as a response to the rapid digitalization of the European financial market, the growth of cashless transactions, and the need to preserve the monetary autonomy of the European Union. The digital euro is not intended to replace cash but to serve as its digital complement, aiming to provide citizens and businesses with a secure, accessible, and efficient means of payment in the digital environment. Its eventual introduction could significantly influence the transmission mechanism of monetary policy, the business models of commercial banks, the structure of payment systems, and the overall stability of the financial system.

In addition to potential benefits, the development of CBDCs raises numerous questions that require an interdisciplinary approach. Prominent among these are user privacy protection, cybersecurity, the potential shifting of deposits from commercial banks to the central bank (disintermediation), the risks of digital bank runs during crises, and the necessity of adapting the regulatory and institutional frameworks. Concurrently, non-eurozone countries that are deeply integrated with the European financial market face the challenge of timely adapting their own financial systems to these emerging technological and regulatory trends. The analysis in this paper tracks the evolution of central bank digital currencies, with a specific focus on the digital euro project and its potential implications for monetary policy, the banking sector, and financial stability. Special attention is dedicated to assessing the prospective effects that the introduction of the digital euro could exert on non-eurozone countries, including the Republic of Serbia. By conducting a critical analysis of contemporary scientific literature, institutional documents, and available statistical indicators, this study aims to identify the key advantages, risks, and developmental opportunities of the digital euro, as well as to evaluate its potential impact on the future development of the European and regional financial systems. To provide a comprehensive assessment of the economic and regulatory dimensions of CBDC development, the methodology applied herein encompasses content analysis, the comparative method, institutional analysis, and descriptive statistics. Against the backdrop of current shifts in the international financial environment, this paper addresses the following research question: To what extent can the introduction of the digital euro enhance the efficiency of the payment system and the transmission of monetary policy, while preserving financial stability and the traditional role of the banking sector? Accordingly, the primary research hypothesis posits that the digital euro represents a significant innovation in the evolution of the modern monetary system; however, its successful implementation depends on a meticulously defined regulatory framework, robust technological security, and the alignment of interests among central banks, commercial banks, and financial service consumers. The paper is structured into several interconnected sections. Following the introduction, the theoretical foundations of central bank digital currencies and a review of the relevant literature are presen-ted. The subsequent section analyzes the development of the digital euro project and its institutional framework, followed by chapters examining its effects on monetary policy, financial stability, and the banking sector. A dedicated chapter addresses the implications for the Republic of Serbia, after which the discussion of the research findings and concluding remarks are presented.

Literature review

An analysis of the available literature reveals that existing research has predominantly focused on the institutional development of the digital euro, its technical architecture, and its effects on monetary policy within eurozone member states. Considerably less attention has been devoted to the potential implications of the digital euro on the financial systems of non-eurozone countries that are heavily integrated with the European market. Most notably, there is a conspicuous lack of studies examining the prospective consequences for the Republic of Serbia within the context of its monetary policy, payment systems, banking sector, and European integration process. This paper seeks to address this research gap by providing a comparative analysis and a critical evaluation of contemporary CBDC development trends from the perspective of Serbia.

To trace the evolution of this academic discourse, we present a chronological synthesis of selected ad hoc analyses conducted to date. Kiff et al. (2020, pp. 5–23) identify the core models of retail CBDCs and define the fundamental institutional and technical frameworks of their design. In doing so, they emphasize the need for further empirical research regarding the impact of these solutions on financial system stability and the structure of banking intermediation, highlighting the associated benefits, risks, and implications for the financial sector. However, from a peer-review perspective, a limitation of their study is the insufficient analysis of how individual CBDC solutions affect specific domestic financial systems and banking sector structures.

In contrast to authors who have focused on the economic and technological facets of central bank digital currencies, Bossu et al. (2020, pp. 22–35) place particular emphasis on the legal prerequisites for their implementation. The authors argue that the successful introduction of a CBDC requires an adequate regulatory framework that precisely defines the central bank's mandate to issue digital currency, its legal status, and its relationship with existing forms of money. They specifically point out that current legislation in many countries is not adapted to the issuance of a digital form of national currency, meaning that introducing a CBDC would necessitate amendments to central bank laws and monetary legislation. The authors conclude that technological readiness alone is insufficient for implementation; rather, legal certainty constitutes a pivotal precondition for the successful functioning of CBDCs. Furthermore, Ahnert et al.

(2022, pp. 1–10) provide a comprehensive overview of the economic literature on central bank digital currencies, analyzing the key motives behind their introduction as well as their implications for monetary policy and financial stability. The authors highlight that while a CBDC can contribute to a more efficient payment system and strengthen monetary transmission, it poses significant risks regarding bank disintermediation and potential disruptions to financial system stability. Consequently, they underscore the necessity for further research into user preferences and privacy protection. Recent studies offer further granular insights into these dynamics. Employing a systematic literature review.

Tang and Si (2025, pp. 4–18) analyze the global evolution of central bank digital currencies and their diverse implementation models. The authors conclude that a universal blueprint for a CBDC does not exist; rather, its optimal design is strictly contingent upon the specific monetary policy objectives, regulatory frameworks, and technological capabilities of each respective jurisdiction. Concurrently, they underscore the critical need for further empirical investigations to capture the long-term macroeconomic ramifications and the systemic impact of CBDCs on financial stability.

Focusing on empirical adoption metrics within the Eurosystem, the European Central Bank (ECB, 2025, pp. 1-8) examines the prospective acceptance of the digital euro among eurozone households. The ECB concludes that the majority of consumers would utilize the digital euro predominantly as a medium of exchange rather than a store of value or savings instrument. Crucially, the findings indicate that the introduction of the digital euro – implemented alongside calibrated holding limits to cap individual digital balances - would exert only a muted and contained impact on the commercial bank deposit base and overall financial stability. On a global scale, the International Monetary Fund (IMF, 2024, pp. 2–5) notes that institutional interest in digital fiat currencies is remarkably widespread, with over 90% of central banks world-wide actively exploring the feasibility of CBDC deployment. The IMF report emphasizes that various jurisdictions occupy highly differentiated stages of development - spanning initial research and pilot programs to advanced implementation phases. The primary catalysts driving this global trend include the modernization of domestic payment architectures, the enhancement of financial inclusion, and the defense of national monetary sovereignty.

Expanding upon these dimensions, **Cannataci et al. (2026, pp. 6–18)** critically analyze the proposed model of the digital euro, asserting that its ultimate success will rely not only on technological readiness but also on addressing user privacy protection, the legal liability of participating actors, and economic incentives for adoption. The authors conclude that developmental transparency and public trust constitute pivotal prerequisites for the widespread acceptance of the digital euro.

Concurrently, the **European Central Bank (ECB, 2025, pp. 1–3)** underscores that the digital euro is conceptualized as a digital equivalent to cash, designed to complement rather than replace physical banknotes and coins. Based on a survey conducted among households across 11 eurozone countries, the study concludes that citizens would primarily utilize the digital euro for everyday transactions, thereby allowing physical cash to retain its role as an essential form of public money. Furthermore, the findings indicate that the introduction of the digital euro - augmented by calibrated holding limits within digital wallets - would exert a contained and limited impact on commercial bank deposits and overall financial stability. However, a notable limitation of the ECB study is its narrow geographic scope, which fails to encompass non-EU economies.

From a structural perspective, Senn et al. (2026, pp. 3–10) systematize the designs of digital payment systems with potential application for CBDC implementation, placing a specific emphasis on technical architectures, privacy models, and the stability of diverse solutions. The authors highlight that the development of central bank digital currencies involves complex trade-offs between security, privacy, and operational efficiency; they contend that there is no single optimal solution, but rather multiple competing architectural approaches dictated by the surrounding institutional framework.

Finally, Gortsos (2026, pp. 15–22) examines the proposed regulatory framework for the digital euro within the European Union, focusing closely on the legal structure and institutional design of the CBDC. The author details the provisions of the European Commission's draft regulation, including the digital euro's status as legal tender, holding caps, and the resulting implications for the monetary sovereignty of member states. He concludes that legal harmonization at the EU level is a fundamental prerequisite for the successful implementation of the digital euro and the preservation of current monetary system stability. Nevertheless, reviewers note a distinct research gap in Gortsos's work, as it entirely overlooks the legal and economic implications for non-eurozone countries.

Reesearch methodology

To ensure a comprehensive and scientifically grounded evaluation of the economic and regulatory dimensions of Central Bank Digital Currency (CBDC) development - with a particular emphasis on the digital euro and its prospective impact on the Republic of Serbia - this study employs a multi-methodological approach. The research framework is systematically structured to combine qualitative and quantitative methods, thereby facilitating the empirical validation of theoretical propositions.

The research design operationalizes the following scientific methods:

- Content Analysis: This method was deployed to conduct a rigorous examination of contemporary domestic and international scientific literature, peer-reviewed journal articles, and specialized studies in monetary economics and financial technologies. Content analysis facilitated the systematic identification of theoretical concepts, benefits, and systemic risks associated with CBDC deployment, while also mapping the prevailing consensus within the academic community regarding the potential disintermeditation of the commercial banking sector.
- Institutional Analysis: Through the application of this method, formal institutional documents, policy reports, and strategic frameworks issued by key monetary authorities were critically evaluated. The focus was directed at the working papers of the European Central Bank (ECB) concerning the architectural design phases of the digital euro; report metrics from the International Monetary Fund (IMF) and the Bank for International Settlements (BIS); and the regulatory strategies of both the European Union (such as the Markets in Crypto-Assets - MiCA regulation) and the National Bank of Serbia (NBS). This approach enabled a comprehensive understanding of the legal and operational environments governing digital currency development.
- Comparative Method: This method was utilized to contrast various CBDC models and architectural designs, focusing primarily on analyzing the asymmetric effects that the digital euro exerts on intra-eurozone economies versus non-eurozone jurisdictions (non-resident areas). Additionally,

the comparative approach served to evaluate the varying degrees of exposure and the developmental phases of CBDC initiatives across the Western Balkan region.

- Descriptive Statistics: The quantitative underpinning of this study relies on the application of descriptive statistics. Through the analysis of secondary statistical data retrieved from official publications of the National Bank of Serbia (such as dinarization reports), the current structure of the domestic deposit and credit aggregates is examined. By employing relative numbers (percentages) and currency structure indicators (specifically, the level of euroization), the hypothesis regarding the high sensitivity of the domestic financial system to external monetary shocks emanating from the eurozone is empirically supported.

The integration of these methodologies provides a robust framework to derive objective conclusions regarding the developmental trajectory of the digital euro, identify systemic risks to regional financial stability, and formulate optimal strategic recommendations for the monetary authorities of the Republic of Serbia.

Research Findings: The Adoption Phases of the Digital Euro and CBDCs Across Selected Southeastern European Economies

Contemporary literature indicates that central bank digital currency (CBDC) represents not merely a technological innovation but a complex economic and institutional transformation with the potential to reshape the structure of the financial system. In this context, the principal challenge lies in identifying an optimal CBDC design that minimizes risks to financial stability while maximizing the benefits in terms of payment efficiency and financial inclusion. From a regional perspective, the Republic of Serbia is currently classified as being in the research and observation phase of CBDC development, without having advanced to the pilot implementation stage. Although the existing legal framework permits the issuance of the Serbian dinar in digital form, no official decision has yet been made regarding the introduction of a digital dinar, nor has an implementation timeline been announced. The National Bank of Serbia (NBS) currently prioritizes the further development of its Instant Payment System (IPS NBS), which already enables highly efficient real-time domestic payment transactions, thereby partially reducing the immediate need for CBDC implementation. Nevertheless, Serbia has established the necessary legal framework, defined the institutional authority for issuing a digital dinar, and is actively working on the development of the required technical architecture (National Bank of Serbia, 2025).

Montenegro represents a unique case of monetary dependence, as its unilateral adoption of the euro without membership in the euro area limits its ability to independently issue a national CBDC. At the same time, this monetary arrangement makes Montenegro directly exposed to the future implementation of the digital euro, since any structural changes to the euro would have immediate implications for the country's financial system and payment infrastructure. In Montenegro, Albania, and North Macedonia, policy priorities are currently focused on the modernization of conventional payment systems, particularly instant payments, and integration into the Single Euro Payments Area (SEPA), while CBDC initiatives remain on hold. The European Central Bank emphasizes that the digital euro is intended to complement cash rather than replace it and acknowledges that its introduction could have broader implications for countries using the euro outside the euro area, particularly regarding payment systems and monetary integration (European Central Bank, 2025, pp. 1–3). The National Bank of Serbia has adopted a proactive approach to the digital transformation of the financial sector, primarily through the early adoption of the Law on Digital Assets and the continuous enhancement of its instant payment infrastructure. Although its primary focus remains on improving the efficiency and security of existing payment systems, the NBS is actively conducting research on the legal, technological, and macroeconomic implications of introducing a digital dinar, thereby ensuring regulatory preparedness for the potential issuance of a Serbian CBDC (Ercegovac & Jakšić, 2026, pp. 57–74).

Since Montenegro does not have its own national currency and unilaterally uses the euro, the Central Bank of Montenegro (CBCG) has adopted a distinctive approach to digital currency research. In cooperation with the global blockchain technology provider Ripple, the CBCG has initiated the development and testing of a pilot project for the country's first national digital currency. The project envisages a digital asset that could operate as a stablecoin or a similar digital token, with the objective of assessing its practical application within the domestic payment system (Crypto for Innovation, 2026).

The Bank of Albania closely monitors global developments in central bank digital currencies, with particular attention to the potential risks that foreign CBDCs, especially the digital euro, may pose to small, open, and partially euroized economies. Albania currently prioritizes the modernization of its national payment infrastructure and harmonization with SEPA standards, while the possible introduction of a domestic CBDC is viewed as a long-term objective. This cautious approach reflects concerns regarding financial disintermediation and the potential migration of deposits from commercial banks to CBDCs during periods of financial stress (Bank of Albania, 2024). The National Bank of the Republic of North Macedonia remains in a passive monitoring phase. Its research primarily focuses on the theoretical macroeconomic implications of a potential digital denar, particularly regarding monetary policy transmission and price stability. Similar to other countries in the region, the country's immediate operational priority is the establishment of a national instant payment infrastructure and deeper regional payment integration, while the technical development of a CBDC is not considered a short-term strategic objective (CBDC Tracker, 2026).

Effects of the Digital Euro on the Euro Area: Balancing Efficiency and Financial Disintermediation

The results of the institutional analysis of European Central Bank (ECB) documents indicate that the primary motivations for introducing the digital euro are to preserve Europe's monetary sovereignty in the face of the expansion of private global stablecoins and foreign central bank digital currency (CBDC) initiatives, while also strengthening the strategic autonomy of the European payments market. The content analysis of the contemporary literature identifies a profound macroeconomic dilemma:

a. Risk of banking sector disintermediation: During periods of financial stress, the digital euro could serve as a "safe haven," potentially triggering a rapid shift of deposits from commercial banks to accounts held with the central bank, thereby increasing the risk of a digital bank run.

b. Risk of unintended "digital euroization": If the digital euro becomes readily accessible to residents outside the euro area, its high liquidity and safety, resulting from the absence of credit risk, may encourage households and firms to convert domestic bank deposits into digital euros. According to the International

Monetary Fund, such liquidity substitution may undermine the stability of local banking systems, weaken demand for national currencies, and significantly reduce the effectiveness of domestic monetary transmission mechanisms in developing economies (International Monetary Fund [IMF], 2024, p. 12).

c. Reduction in remittance costs: Conversely, ECB institutional documents highlight the benefits of introducing cross-border functionalities within the digital euro framework. These primarily include a substantial reduction in intermediation costs and faster cross-border remittance transfers from the diaspora, thereby increasing disposable income in recipient countries across the Western Balkans (European Central Bank [ECB], 2023, p. 24).

d. Implementation challenges: Despite its potential benefits, the introduction of the digital euro presents considerable implementation challenges. The adaptation of the European banking sector is estimated to cost between €18 billion and €30 billion, reflecting the need to upgrade mobile banking applications, online banking platforms, payment terminals, and ATM infrastructure. Concerns have also been raised regarding the accessibility of the digital euro for all citizens, particularly in Central and Southeastern Europe, where cash remains the dominant means of payment and both digital literacy and access to banking infrastructure remain uneven. The debate surrounding the digital euro has continued for more than four years and has been accompanied by a wide range of controversies, including concerns over increased government surveillance of private financial transactions and the possible gradual elimination of cash. The experience of the Nordic countries, where cash usage has declined dramatically, demonstrates that payment digitalization can occur rapidly, whereas in many other parts of Europe cash continues to play an indispensable role. From a strategic perspective, the digital euro could also reduce Europe's dependence on global card payment networks and strengthen the monetary sovereignty of the euro area. Furthermore, cash currently accounts for approximately 10% of GDP in most European countries, with substantially lower shares in the Nordic region, illustrating the broader global trend of declining cash usage (Jakovac, 2025, pp. 27–45).

e. Risk mitigation mechanisms (ECB strategy): Descriptive st Descriptive statistics and simulation models developed by the ECB suggest that the risks associated with the widespread use of the digital euro can be effectively mitigated through the introduction of strict holding limits per individual - currently proposed at approximately €3,000–€4,000 - and by applying non-remunerated or even negative interest rates to digital euro wallets.

From the perspective of this study, imposing a holding limit of approximately €3,000 appears to be an effective mechanism for preventing large-scale liquidity outflows from commercial banks and preserving financial stability. However, such a restriction simultaneously constrains the capacity of the digital euro to function as a medium for high-value transactions, effectively limiting its role to that of a retail payment instrument.

Critical Implications of the Digital Euro for the Financial System of the Republic of Serbia: Exposure and Strategic Responses

A central focus of this study is the potential impact of the digital euro on the Republic of Serbia as a highly euroized emerging economy, where more than 60% of household savings and a substantial share of bank lending are denominated in, or indexed to, the euro. The results of the descriptive statistical analysis of Serbia's deposit and lending structure indicate that unrestricted access to the digital euro could generate asymmetric pressures on the domestic banking sector. Serbian commercial banks could lose a portion of their stable euro-denominated funding base as households and firms shift deposits toward digital euro holdings. Such a development would likely increase banks' funding costs and, consequently, raise borrowing costs for both businesses and households. According to official data published by the National Bank of Serbia, foreign currency and foreign currency-indexed deposits account for 82.9% of total household deposits, while the corresponding share for corporate deposits amounts to 61.8% (National Bank of Serbia [NBS], 2025, p. 11).

At the same time, the National Bank of Serbia (NBS) has successfully implemented and continues to develop its own modern payment infrastructure through the IPS NBS instant payment system. This provides Serbia with a relatively strong technical foundation and enhances its negotiating position in the context of future interoperability with the digital euro ecosystem. Based on the institutional analysis conducted in this study, the discussion identifies three potential scenarios for the Republic of Serbia following the official launch of the digital euro.

Scenario 1: Passive Monitoring and Restrictive Approach. The National Bank of Serbia (NBS) may maintain a conservative policy stance by employing regulatory measures and foreign exchange controls to limit the opening and use of digital euro wallets by Serbian residents. Such an approach would aim to preserve the role of the domestic currency and protect the dinar-based monetary space, albeit at the cost of foregoing the potential benefits of faster financial integration and more efficient cross-border payments.

Scenario 2: Interoperability and SEPA Integration (Most Likely Scenario). Serbia accelerates its accession to the Single Euro Payments Area (SEPA), while enhancing the interoperability of the NBS Instant Payment System (IPS) with European payment infrastructures. This approach would facilitate faster, lower-cost, and more efficient cross-border transactions, whereas the introduction of a central bank digital currency (CBDC), in the form of a digital dinar, would remain a longer-term strategic objective.

Scenario 3: Development of a Digital Dinar as a Counterpart. The National Bank of Serbia initiates the development of its own central bank digital currency (CBDC), the digital dinar, designed to offer technical functionalities comparable to those of the digital euro. At the same time, the digital dinar would incorporate domestic policy incentives aimed at preserving monetary sovereignty, strengthening the role of the national currency, and supporting the ongoing process of dinarization.

Discussion Summary and Synthesis of Results with a Focus on Serbia

By synthesizing all the analyzed parameters, this paper concludes that the digital euro represents not only a threat to regional financial stability but also a powerful catalyst for reforms in Serbia. The research presented in the table confirms that the impact of the digital euro on the Republic of Serbia will predominantly depend on the speed and quality of the NBS's regulatory response.

In our assessment, one of the most significant aspects of the prospective introduction of the digital euro for non-euro area economies concerns the technical parameters, particularly the holding limits, that will be established by the European Central Bank (ECB) for non-residents of the euro area. These parameters are likely to play a decisive role in determining the extent to which the digital euro will influence financial systems outside the monetary union. With regard to the operational design of the digital euro, the ECB has devoted particular attention to defining quantitative holding limits for individual users. While an initial holding limit in the range of EUR 3,000–4,000 per individual is currently envisaged for euro area residents, the operational framework for non-residents is expected to be considerably more restrictive and flexible. According to the ECB's official report, holding limits for non-residents will not be uniform across jurisdictions. Instead, they will be determined through bilateral arrangements between the ECB and the central banks of non-euro area countries or set at substantially lower levels (e.g., up to EUR 1,000–1,500 per individual) in order to prevent the digital euro from becoming a dominant store of value in third countries (European Central Bank [ECB], 2023, p. 35). In addition to stricter holding limits, the ECB intends to introduce rigorous transaction limits for non-resident users, including daily and monthly caps on payment volumes. These safeguards are explicitly designed to mitigate the risk of accelerated digital euroization, protect the domestic deposit base of commercial banks in the Western Balkans, and reduce the likelihood of macroeconomic instabili-

Table 1. Synthesis of Reform Priorities in Preparation for the Adoption of the Digital Euro Framework in Serbia

Domain of Analysis	**Key Advantage**	**Primary Identified Risk**	**Strategic recommendation for Serbia**
Monetary Policy	Increased transaction speed and reduced cross-border transaction costs.	Loss of control over the monetary base due to digital euroization.	Maintaining strict regulation of cross-border digital money flows in the early stage.
Banking Sector	Incentive for innovation and the development of new fintech services.	Deposit outflows (disintermediation) and a decline in bank liquidity.	Enhancement of domestic deposit products and digital functionalities of domestic banks.
Financial Stability	Reduction of systemic risk through the elimination of intermediaries in clearing.	Digital bank runs during macroeconomic shocks.	Alignment of domestic legislation (Law on Digital Assets) with the EU MiCA framework and ECB standards.

Source: *Adapted from "Implications of Central Bank Digital Currency for Monetary Operations," International Monetary Fund (IMF), 2024, IMF FinTech Notes, 2024(007), pp. 12–15; and "Report on the Dinarisation of the Financial System of Serbia," National Bank of Serbia (NBS), 2025, p. 11.*

ty arising from sudden liquidity shifts during periods of financial stress (ECB, 2023, p. 37).

These design features are of particular relevance to the present analysis. The overall impact of the digital euro on Serbia will depend not only on the policy response of the National Bank of Serbia (NBS) but also, and perhaps more importantly, on the degree of restrictiveness of the holding and transaction limits that the ECB ultimately applies to non-euro area countries. For example, if Serbian residents were permitted to hold no more than EUR 1,000 in digital euro, the risk of large-scale deposit outflows from domestic commercial banks would be substantially reduced. At the same time, however, such restrictive limits would also diminish the practical usefulness of the digital euro for cross-border payments, trade, and financial integration.

Conclusion

The research conducted in this paper confirms that the digital euro project represents a historical milestone in the evolution of the European financial system, the external spillover effects of which are expanding asymmetrically into non-euro area economies, including the Republic of Serbia. Through the application of comparative and institutional analysis, a fundamental macroeconomic dilemma has been identified: while the digital euro offers substantial advantages in terms of reducing cross-border transaction costs and accelerating remittance inflows, it simultaneously generates severe systemic risks. For a highly euroized economy such as Serbia, the core challenge lies in the risk of inadvertent "digital euroization" and the potential disintermediation of the domestic banking sector resulting from deposit flight.

The outcomes of this discussion indicate that the intensity of these risks will predominantly depend on two factors: the restrictiveness of the quantitative holding limits established by the European Central Bank for non-residents, and the velocity and quality of the regulatory response adopted by the National Bank of Serbia. The most plausible and optimal strategic scenario for Serbia involves accelerating technical integration into the SEPA system and ensuring the interoperability of the domestic payment infrastructure (NBS IPS) with European solutions, while maintaining a cautious stance regarding the direct issuance of a domestic CBDC in the short term - thereby deferring such initiatives to the medium or long term.

References

Ahnert, T., Hoffmann, P., & Monnet, C. (2022). The economics of central bank digital currency (ECB Working Paper No. 2713). European Central Bank. https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp2713~56a42750e3.en.pdf

European Central Bank. (2025). *The digital euro: Awareness, adoption and household portfolios* (Research Bulletin No. 138). https://www.ecb.europa.eu

International Monetary Fund. (2024). Implications of central bank digital currency for monetary operations. IMF FinTech Notes, 2024 (007), 12–15. https://www.imf.org/en/Publications/fintech-notes/Issues/2024/09/03/Implications-of-Central-Bank-Digital-Currency-for-Monetary-Operations-552631

European Central Bank. (2025). Progress report on the digital euro preparation phase (Report No. 6). https://www.ecb.europa.eu/pub/pdf/other/ecb.digitaleuro_progress_report_2025.en.pdf (ili stvarni URL link konkretnog dokumenta koji koristmo)

National Bank of Serbia. (2025). Report on the dinarisation of the financial system of Serbia. NBS. https://www.nbs.rs

Jakovac, M. (2025). The digital euro a new era of public money and privacy protection in the eurozont, Book of pro Jakovac, M. (2025). cedings, 8th International scientific conference on digital economy diec 2025, Tuzla, 27-45 file:///C:/Users/KORISNIK-/Downloads/DIEC8-online-zbornikradova.pdf

Narodna banka Srbije. (2025). *Instant Payment System (IPS NBS) - Annual report on payment systems development.* https:// www.nbs.rs

European Central Bank. (2023). Digital euro a stocktake on the work carried out and next steps (Report No. 5). ECB. https://www.ecb.europa.eu/pub/pdf/other/ecb.digitaleuroreport202310~95bc2dfb18.en.pdf

CBDC Tracker. (2026). Central Bank Digital Currency tracker: North Macedonia status. Bozar & Co. https://cbdctracker.org/

Bossu, W., Itatani, M., Margulis, C., Rossi, A. D. P., Weenink, H., & Yoshinaga, A. (2020). *Legal aspects of central bank digital currency: Central bank and monetary law considerations* (IMF Working Paper No. 20/254). International Monetary Fund. https://doi.org/10.5089/9781513561622.001

Bank of Albania [BoA], (2024). Digital currencies: Impact on financial stability and financial cycle (Discussion Material). Bank of Albania Research Department. https://www.bankofalbania.org/rc/doc/Material_per_diskutim_DIGITAL_CURRENCIES_IMPACT_ON_FINANCIAL_STABILITY_AND_FINANCIAL_CYCLE_anglisht_web_22448.pdf

Crypto Counsil for Innovation. (2026, May 12). Montenegro takes tentative steps towards crypto regulation.https://cryptoforinnovation.org/montenegro-takes-tentative-steps-towards-crypto-regulation/

Ercegovac, M., & Jakšić, M. (2026). Digital currencies as the future of monetary system: Analysis of the regulatory and market framework in Serbia. Journal of Financial Studies, 14(2), 57–74. https://www.vps.ns.ac.rs/wp-content/uploads/2026/04/57-74-ercegovac.pdf

Gortsos, C. V. (2026). The digital euro as a landmark in the evolution of the euro area's monetary law. European Law Journal, 32(1), 15–28. https://doi.org/10.1111/eulj.12560

Senn, M., Weber, T., & Kaufmann, D. (2026). Central bank digital currencies and financial intermediation: The retail digital euro challenge. European Economic Review, 162(1), 3–10. https://doi.org/10.1016/j.euroecorev.2025.104650

Cannataci, J. A., Caruana, A., & Zhao, L. (2026). Privacy, data protection and the digital euro: Navigating the regulatory landscape (European Parliament Policy Department Study No. PE 791.420). European Parliament. https://www.europarl.europa.eu/thinktank/en/document/EPRS_STU(2026)791420

Bank for International Settlements. (2024). Annual economic report 2024. BIS. https://www.bis.org/publ/arpdf/ar2024e.htm

Tang, X., & Si, Y. (2025). Central bank digital currencies and cross-border payments: Implications for emerging market economies. Journal of International Financial Markets, 31(1), 4–18. https://doi.org/10.1016/j.intfin.2024.102145

Kostadinović, G., & Ilievska Kostadinović, M. (2026). The role of financial forensics in the prevention and detection of money laundering. Management horizons, 6(1), 123-137. https://hm.edu.rs/index.php/hm/article/view/60

Kiff, J., Alwazir, J., Davidovic, S., Farias, A., Khan, A., Khiaonarong, T., Malaika, M., Mok, H. K., Narain, A., Nova, N., Soheili, K., Tourpe, D., & Zhou, P. (2020). A survey of research on retail central bank digital currency (IMF Working Paper No. 20/104). International Monetary Fund. https://www.imf.org/en/Publications/WP/Issues/2020/06/26/A-Survey-of-Research-on-Retail-Central-Bank-Digital-Currency-49517

DIGITALNI EVRO I DIGITALNE VALUTE CENTRALNIH BANKI (CBDC): IZAZOVI ZA MONETARNU POLITIKU, FINANSIJSKU STABILNOST I BUDUĆNOST PLAĆANJA

Sažetak: Digitalna transformacija finansijskog sistema poslednjih godina podstakla je centralne banke širom sveta da intenziviraju istraživanje i razvoj digitalnih valuta centralnih banaka (CBDC). Među najistaknutijim inicijativama je projekat digitalnog evra, koji predstavlja odgovor na ubrzanu proliferaciju digitalnih metoda plaćanja, uspon privatnih digitalnih valuta, kao i na imperativ očuvanja monetarnog suvereniteta i finansijske stabilnosti. Predmet ovog istraživanja jeste analiza koncepta digitalnog evra i njegovih potencijalnih ekonomskih i institucionalnih implikacija. Cilj rada je da ispita perspektivne efekte uvođenja digitalnog evra na sprovođenje monetarne politike, poslovanje bankarskog sektora, efikasnost platnih sistema i stabilnost finansijskog sistema. Pored toga, rad se bavi izazovima koje ovaj oblik valute može doneti zemljama van evrozone, sa posebnim osvrtom na Srbiju. Metodologija primenjena u ovom istraživanju obuhvata analizu sadržaja relevantne domaće i međunarodne naučne literature, komparativni metod, institucionalnu analizu i deskriptivnu statistiku na osnovu dostupnih podataka međunarodnih finansijskih institucija. Rezultati istraživanja ukazuju na to da digitalni evro može unaprediti sigurnost, dostupnost i efikasnost platnih sistema, povećati otpornost monetarnog sistema i stimulisati inovacije u finansijskom sektoru. Istovremeno, njegova implementacija otvara ključna pitanja u vezi sa zaštitom privatnosti korisnika, potencijalnom disintermedijacijom i smanjenjem baze depozita komercijalnih banaka, sajber rizicima, kao i prilagođavanjem regulatornog okvira. Naučni doprinos ovog rada ogleda se u kritičkoj analizi savremenih pristupa razvoju CBDC-a i komparativnoj proceni potencijalnih implikacija digitalnog evra na finansijske sisteme zemalja u procesu evropskih integracija, sa posebnim naglaskom na Srbiju i Zapadni Balkan.

Ključne reči: digitalni evro, digitalna valuta centralne banke (CBDC), monetarna politika, finansijska stabilnost, bankarski sektor, platni sistemi

Recenzenti (Reviewers):

1 doc.dr Veljko Mijušković, Faculty of Economics Belgrade, University of Belgrade

2. doc. dr. Dženis Bajramović, Department of Economics and Computer Sciences, University of Novi Pazar

3. Prof. Dr. Suad Becirović, Department of Economics and Computer Sciences, University of Novi Pazar

4. prof. Petar Veselinović, Faculty of Economics, Kragujevac, University of Kragujevac

5.prof. Dr. Safet Kurtović, Faculty of Management and Business Economics, University of Travnik

6. Prof. Dr. Enis Ujkanović, Department of Economics and Computer Sciences, University of Novi Pazar

7. Prof. Dr. Nebojša Đokić, Faculty of Economics Priština with temporary seat in Kosovska Mitrovica, University of Priština with temporary seat in Kosovska Mitrovica

8.Prof. dr Saša Obradović, University of Kragujevac, Faculty of Economics, Kragujevac, Serbia

9.Prof. dr Andrijana Kos Kavran, Međimurje University of applied sciences in Čakovec, Croatia

10.Prof. dr Hristo Ivanov Katrandziev, University of national and world economy, Bulgaria

11.Prof. dr Jasmina Starc, Faculty of Business and Management Sciences, University of Novo mesto, Slovenia

12.Prof. dr Ljiljan Veselinović, School of Economics and Business, University of Sara-jevo, Bosnia and Herzegovina

13.Prof. dr Jozefina Beke Trivunac, Faculty of trade and banking, Alfa BK University, Beograd

14.Doc. dr Dejan Jovanović, Faculty of Economics, University of Kragujevac

15.Prof. dr Mirjana Todorović, Faculty of Economics, University of Kragujevac

16.Prof. dr Goran Marković, University of Istočno Sarajevo, Faculty of Law, Pale, Bos-nia and Herzegovina

17.Prof. dr Jovanka Jakubek Lalik, University of Warsaw, Faculty of Law and Admi-nistration, Warszawa, Poland

18.Prof. dr. Slaviša Trajković., Faculty of Economics Prishtina with temporary seat in Kosovska Mitrovica, University of Pristina with temporary seat in Kosovska Mitrovica

19. Prof. dr. Aleksandar Đokić, Faculty of Technical Sciences, in Kosovska Mitrovica, University of Pristina with temporary headquarters in Kosovska Mitrovica

20. Prof. dr. Ljiljana Arsić, Faculty of Economics Prishtina with temporary seat in Kosovska Mitrovica, University of Pristina with temporary seat in Kosovska Mitrovica

21Prof. Dr. Srđan Đorđević, Faculty of Law, Kragujevac, University of Kragujevac

22. Prof. dr. Jadranka Đurović Todorović, Faculty of Economics, Niš, University of Niš

23. Prof. dr. Ivan Božović, Faculty of Economics Priština with temporary seat in Kosovska Mitrovica, University of Pristina with temporary seat in Kosovska Mitrovica

24. Prof. Dr. Marina Đorđević, Faculty of Economics, Niš, University of Niš

25. Prof. dr Vladan Pavlović, Ph.D., Faculty of Economics Prishtina with temporary seat in Kosovska Mitrovica, University of Pristina with temporary seat in Kosovska Mitrovica

26.Prof. dr Hristo Ivanov Katrandziev, University of national and world economy, Bulgaria

27.Prof. dr Jasmina Starc, Faculty of Business and Management Sciences, University of Novo mesto, Slovenia

Ekonomski signali, 2026, 21 (1): 165-170

UPUTSTVO AUTORIMA ZA PRIPREMU RADOVA

Redakcija časopisa „Ekonomski signali“ [1]

[1] Akademija strukovnih studija Kosovsko Metohijska - odsek Peć u Leposaviću, 32182 Leposavić, Kosovo i Metohija, Srbija vespec@ves-pec.edu.rs

Rezime. Rezime treba da obuhvati sadržaj rada i da sadrži najmanje 70 i najviše 150 reči. Veličina fonta za rezime treba biti 10, ceo rezime treba biti uvučen 1 cm sa leve i desne strane margine. Takođe, potrebno je razdvojiti rezime sa 2 prazna reda (veličina 10) sa gornje i donje strane. Potrebno je, takođe, naslov, rezime i ključne reči prevesti na engleski jezik i poslati ga na kraju rada...

1. Uvod

Instrukcije i odgovarajući šablon MS Word dokumenta dati u ovom radu predstavljaju formu koju autori moraju poštovati prilikom pisanja radova za časopis Ekonomski signali. Radovi predati u tehnički neodgovarajućoj formi biće vraćeni na ispravku, ili odbijeni ukoliko izmene ne budu završene na vreme.

2. Priprema rada

Redakcija časopisa „Ekonomski signali“ preporučuje da se koristi MS Word za pripremu radova, a zatim da se pošalje rezultujuća MS Word datoteka (file). Moguće je pisati rad i u LaTeX-u, pri čemu je, pored obaveznih LaTeX datoteka, neophodno poslati i PDF datoteku poslednje (odobrene) verzije rada. Mole se autori da se pridržavaju instrukcija i u ostalim stavkama, kako bi bilo moguće napraviti jedinstvenu formu za sve radove jednog broja.

Napomenimo da klasa/stil datoteka i šablon rada ne može biti promenjen. Zato je potrebno pridržavati se uputstva vezanog za format i veličinu fonta, sve u cilju da krajnji proizvod bude što je moguće više homogen.

2.1. Region za štampanje

Region za štampanje je 122 mm x 193 mm. Tekst treba biti poravnat sa obe strane kako bi se obezbedilo zauzimanje cele širine linije. Treba obezbediti da desna margina ne bude neravna, sa rečima koje su spojene crticom, kao što je uobičajeno.

2.2. Izgled, vrsta slova, veličina fonta i numerisanje

Koristiti font Century za sva formatiranja teksta. Koristiti veličinu 10 za ime (imena) autora i veličinu 9 za adresu (adrese) i rezime. Za glavni tekst koristiti veličinu fonta 10 i prored 1. Za naslove najvišeg nivoa (1., 2. itd.) koristiti veličinu 12, a za ostale nivoe koristiti veličinu 10. Italic stil može biti korišćen radi naglašavanja reči u tekstu. Podebljane i podvučene reči treba izbegavati. Sa ovim veličinama, prostor između linija trebao bi biti tako postavljen da na jednoj strani ima oko 45 linija punog teksta.

Naslovi. Naslovi treba da počinju velikim slovom i, sa izuzetkom naslova rada, trebaju biti poravnati sa leve strane. Veličine fonta date su u tabeli 1.

Leme, pretpostavke i teoreme. Brojevi koji se odnose na leme, pretpostavke, teoreme itd. treba da se pojavljuju u uzastopnom nizu, počev od broja 1, a ne, na primer, od broja 11.

Tabela 1. Veličine fonta za naslove. Naslovi tabela trebaju uvek biti pozicionirani iznad tabele. Poslednja rečenica naslova tabele treba biti završena bez tačke

Nivo naslova	Primer	Veličina fonta i stil
Naslov rada (centriran)	Predavanje o …	16, podebljan
Naslov prvog nivoa	**1 Uvod**	12, podebljan
Naslov drugog nivoa	**2.1 Region za štampan'e**	10, podebljan
Naslov trećeg nivoa	**Naslovi.** Tekst koji sledi …	10, podebljan
Naslov četvrtog nivoa	*Napomena.* Text koji sledi…	10, italic

2.3. Slike i fotografije

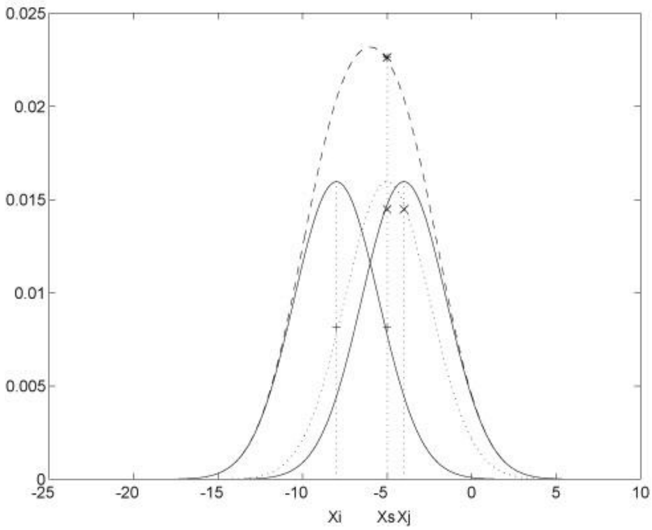
Autori se mole da svoje slike prave u elektronskom obliku, ukoliko je moguće, i integrišu ih u svoju tekstualnu datoteku. Ukoliko se koristi MS Word, potrebno je koristiti „In Line with Text“ opciju za integrisanje slike sa tekstom.

Treba proveriti da li su linije crteža prekinute, ili cele i da li imaju konstantnu širinu. Mreža i detalji unutar slike moraju biti jasno čitljivi. Linije crteža moraju imati rezoluciju najmanje 800 dpi (poželjno je 1200 dpi). Za digitalne crno-bele ilustracije (polutonove) 300 dpi je obično dovoljno. Natpis na slikama treba da ima širinu od 2 mm (veličina 10).

Slike treba da budu numerisane i da imaju naslov koji bi uvek trebao biti pozicioniran ispod slike, za razliku od naslova tabele, koji uvek treba da bude iznad tabele. Poslednja rečenica naslova, bilo da se radi o slici, ili o tabeli ne treba da se završava tačkom. Potrebno je centrirati naslov slike između margina i koristiti veličinu fonta 9 (Slika 1. na primer). Prostor između teksta i slike treba biti oko 8 mm, a prostor između slike i naslova oko 5 mm.

Napomena 1. U štampanim brojevima, ilustracije su generalno crno-bele (polutonovi) i samo u izuzetnim slučajevima, ukoliko je autor spreman da pokrije dodatne troškove za reprodukciju slika u boji, mogu se prihvatiti slike u boji. Ukoliko su slike u boji neophodne, molimo vas da nam pošaljete odvojene datoteke u boji.

Napomena 2. Da biste obezbedili da reprodukcija vaših ilustracija bude prihvatljvog kvaliteta, savetujemo da izbegnete korišćenje senke. Kontrast treba biti što je moguće veći. Ovo se posebno odnosi na ekranske forme.



Slika 1. Ovo je prikaz slike koja se sastoji od različitih tipova linija. Elementi slike opisani u naslovu trebali bi biti napisani u *italic* stilu. Poslednja rečenica u naslovu slike treba, generalno, da se završava bez tačke

2.4. Formule

Prikazane jednačine ili formule su centrirane i stavljene u posebnu liniju (sa dodatnom linijom prostora iznad i ispod). Prikazani izrazi trebaju biti numerisani. Bro'evi trebaju biti uzastopni unutar svake sekcije, ili unutar priloga, sa bro'evima koji su zatvoreni zagradama i koji se nalaze na desnoj margini. Na primer:

$$x + y = z\ . \tag{1}$$

Molimo vas da punktirate prikazane jednačine kao i originalan tekst, ali sa malim razmakom pre interpunkcijskog znaka.

2.5. Programski kod

Programski listinzi, ili programske komande u tekstu se postavljaju u tekstu u fontovima Courier, ili Courier New.

Primer kompjuterskog programa Jensen K., Wirth N. (1991) Pascal user manual and report. Springer, New Mork

```
program Inflation (Output)
   {Assuming annual inflation rates of 7%, 8%, and
   10%,... years};
   const MaxYears = 10;
   var  Year: 0..MaxYears;
        Factor1, Factor2, Factor3: Real;
   begin
      Year := 0;
      Factor1 := 1.0; Factor2 := 1.0; Factor3 := 1.0;
      WriteLn('Year 7% 8% 10%'); WriteLn;
      repeat
          Year := Year + 1;
          Factor1 := Factor1 * 1.07;
          Factor2 := Factor2 * 1.08;
          Factor3 := Factor3 *1.10;
          WriteLn(Year:5,Factor1:7:3,Factor2:7:3,
              Factor3:7:3)
      until Year = MaxYears
end.
```

2.6. Endnote

Endnote treba smestiti na kraju rukopisa, ispred Referenaca.

Fusnote se ne prihvataju.

2.7. Citati

Prezime autora, godina publikovanja i strana izvora: na primer: (Wang, 1997, 144);

Direktno navođenje u tekstu, na primer: „Ako su ljudi zauzeti ceo dan ...“ (Heleta, 2008, 110). Ili, na primer: Heleta (2008, 112) navodi „... kreativnost predstavlja pobedu navika sa originalnošću“.

2.8. Numerisanje strana i zaglavlja

Rad ne treba da sadrži numerisane strane: njih će postaviti izdavač. Nije potrebno stavljati ni zaglavlja (Header and Footer).

2.9. Kvalitet štampe

Očekuje se da, pored elektronske verzije u MS Word, i PDF formatu, treba priložiti i štampanu verziju (jednostrano štampanu). Molimo vas da koristite štampače visoke rezolucije, preporučljivo je laserske štampače sa najmanje 300 dpi. Tekst treba biti poravnat sa obe strane. Format papira (A4, Letter) je irelevantan.

3. Lista za proveru

Prilikom slanja radova u redakciju, potrebno je proveriti da li sadrži sledeće:

- izvornu datoteku, npr. MS Word datoteku koje integriše tekst i slike;
- datoteku u PDF formatu;
- jednostranu štampanu verziju (ne fotokopiju) finalne verzije rada;
- datoteke sa stilovima, šablonima i specijalnim fontovima koji su, možda korišćeni;

Ukoliko postoji dodatni materijal, potrebno je poslati:

- kratak opis dodatnog materijala;
- datoteke sa slikama u boji u elektronskoj verziji

4. Reference

U tekstu:

- u slučaju jedne reference, izvor se navodi na sledeći način: (Keur, 2014, 423-425);
- u slučaju više referenaca, izvore treba poredati hronološki, na primer: (Heleta M,. 2008, 120-121; Frain, B. 2014, 166)
- ukoliko je referenca publikacija zvanične organizacije navodi se skraćenica naziv (RZS, 2010, 22)

Kod referenci sa jednim ili dva autora, navode se prezimena autora, godina izdanja, i strana. Primer dva autora: (Talbot & McLean, 2014, 115)

Kod referenci sa tri ili više autora, navodi se prvi autor i nastavak „i dr.," (autori na engleskom nastavak „et al.,". Primer: (Trklja i dr., 2015, 125), odnosno (Keur et al., 2014, 89).

U listi referenaca na kraju rukopisa:

- treba navesti samo one izvore na koje se autori neposredno pozivaju i na njih upućuju u svom rukopisu;
- radovi se navode bez numerisanja, prema prezimenima autora, u abecednom redosledu;

- ukoliko više od 'edne reference ima isto autorstvo i datum - da bi se obezbedilo razlikovan'e referenaca - koristi se: a, b,... nakon datuma, na primer: Jackson, M. C. (2006a);
- ukoliko neka referenca posedu'e DOI bro', treba ga navesti na kra'u reference.
- u referencu publikacije zvanične organizaci'e doda'e se skraćenice iza naziva.

4.1. Knjiga sa jednim autorom:

Frain, B. (2014). *HTML5 i CSS3, Prilagodljiv web dizajn*, Beograd, Kompjuter biblioteka

Heleta M. (2008). *Menadžment kvaliteta*, Beograd, Univerzitet Singidunum

4.2. Knjiga sa dva autora:

Talbot, J. & McLean, J. (2014). *Programiranje Android aplikacija*, Beograd, CET

4.3. Knjiga sa više od dva autora:

Keur, C., Hillegass, A. & Conway, J. (2014). *Pragramiranje aplikacija za IOS*, Beograd, Mikro knjiga

4.4. Članak u časopisu:

Trkl'a R., Dašić B. & Trklja M. (2015). Budžet Republike Srbije - pregled prihoda i rashoda. Leposavić, *Ekonomski signali*, 10(2), str. 44.

4.5. Web site:

Krstanoski, N. (2015). Trunk with branches public transport scheduling under condition of uniform headway operation, *International Journal for Traffic and Transport Engineering, 2015, 5(4): 400 - 405*, Posećeno 01.06.2016, http://ijtte.com/issues/64/

4.6. Zvanična publikacija

Republički zavod za Statistiku (RZS). (2010). Klasifikacija delatnosti. Beograd, Republika Srbi'a: Republički zavod za Statistiku.

CIP – Каталогизација у публикацији

Народна библиотека Србије, Београд

33

EKONOMSKI signali / glavni i odgovorni urednik Boris Siljković. — Vol. 1, br. 1 (mart 2006) - . - Leposavić: Visoka ekonomska škola strukovnih studija Peć, 2006 - (Leposavić : Svarog). - 24 cm

Polugodišnje.

ISSN 1452-4457 = Ekonomski signali (Leposavić)

COBISS.SR-ID 129429516