

UNIVERSITY OF MONTENEGRO

FACULTY OF

ECONOMICS

RESEARCH

OUTLOOK

2021 – 2022

SCIENCE
IS BUT
AN IMAGE
OF THE
TRUTH



Sir Francis Bacon

PUBLISHER

Faculty of Economics
University of Montenegro

EDITOR-IN-CHIEF

Mijat Jocović, Dean

EDITORIAL BOARD

Mijat Jocović, Full Professor
Jovan Đurašković, Assistant Professor
Tamara Backović, Assistant Professor
Zdenka Dragašević, Assistant Professor

PHOTOS

Igor Šljivančanin
Mikael Kristenson (Unsplash)
Ronald Carreño (Pixabay)
Scott Graham (Unsplash)
Archive - Faculty of Economics

PODGORICA

November 2022

CONTENTS

<u>MISION, VISION AND VALUES</u>	<u>5</u>
<u>ABOUT THE FACULTY</u>	<u>7</u>
<u>LIST OF RESEARCHERS</u>	<u>10</u>
<u>KEY FACTS (2021-2022)</u>	<u>11</u>
<u>SCIENTIFIC RESEARCH PERSPECTIVE</u>	<u>13</u>
<u>INTERNATIONAL PROJECTS</u>	<u>17</u>
<u>PUBLISHING</u>	<u>19</u>
<u>EDITORIAL ACTIVITIES</u>	<u>20</u>
<u>ECONOMIC SEMINAR</u>	<u>21</u>
<u>FULL REFERENCE LIST (2021-2022)</u>	<u>23</u>
<u>APPENDIX</u>	<u>39</u>



УНИВЕРЗИТЕТ ЦРНЕ ГОРЕ
ОШОМСКИ ФАКУЛТЕТ

57

The Faculty of Economics is one of the most important educational and research institutions, providing highly qualified professionals in the field of economics in Montenegro. During its 62 years of outstanding efforts, the Faculty has proven to be one of the key actors in creating reliable staff support in the process of building a modern economic and business environment. In addition to the educational element, the Faculty of Economics remains a fundamental partner in implementing key economic reforms.

MISSION

Educating future leaders in the process of building a modern economic and business environment on national, regional, and global levels.

VISION

Faculty of Economics is the elite higher education institution for providing the economics and business knowledge, skills, and abilities that will provoke scientific curiosity as a precondition for the progress of society.

VALUES

Academic freedom – respect the professors' and students' autonomy, proclaiming the freedom of thoughts, expression, and speech.

Integrity – protecting high ethical standards in personal and professional activities with transparency and responsibility in governance.

Community – improving a sense of community and belonging, protection against discrimination.

Innovation – enhancing creativity, entrepreneurial curiosity, and openness to new ideas.

Social impact – social dimensions affirmation of scientific knowledge.



ABOUT THE FACULTY

The Faculty of Economics is **the oldest higher education institution in Montenegro** and the founder of the University of Montenegro. In addition to educational activity, the Faculty engages in scientific research and professional activities in various forms. This includes diverse projects, courses for knowledge innovation, professional development and training of personnel, consulting, scientific and expert discussions, academic and professional cooperation with other institutions, publishing professional and scientific publications.

The main objective of the Faculty is to maintain its leading position in the national higher education market. The implementation of this objective implies the training of highly educated personnel in the field of economics and management, the promotion of scientific research and pedagogical work of teaching personnel, and better positioning in the international higher education market. The Faculty and its employees are dedicated to developing interest in strengthening the entrepreneurial initiative, creative and interdisciplinary approach among young people, using modern teaching and research methods. In this regard, the Faculty has modern textbooks and adequate IT technology, which supports the objectives set.

The institution is committed to the constant improvement of scientific research and teaching process on the concept of lifelong learning, as the foundation of its future development. Students of the Faculty of Economics have the opportunity to spend a part of their studies at prestigious international universities, to present their work at the symposia, as well as to express their competitive spirit in numerous competitions.

Faculty has more than **2.200 active students** and **43 full-time professors and associates**, of which 35 hold a PhD degree and 8 hold a Master's degree.

The last accreditation of the study program was carried out in 2017, and two study programs were accredited:

Academic program – Economics

Undergraduate studies lasting three years (1.217 active students)

Master's studies lasting two years (338 active students)

Doctoral studies lasting three years (46 active students)

Applied program – Management

Undergraduate studies (Podgorica) lasting three years (368 active students)

Undergraduate studies (Bijelo Polje) lasting three years (128 active students)

Master's studies lasting two years (118 active students)

In order to respond to the demands of the market, the Faculty is implementing two new study programs starting from the next academic year – the Program of undergraduate academic studies in Economics and Business in English, as well as the Distance learning applied study program in Management. Demographic changes in Montenegro as well as the implementation of the Internationalization Strategy of the University of Montenegro were the main initiators of the idea of establishing an undergraduate study program in English.

The Faculty of Economics consists of **five departments:**

Department of **Economic Analysis and Policy,**

Department of **Quantitative Economics,**

Department of **Finance and Accounting,**

Department of **Management and Marketing,**

Department of **Business Informatics.**

In addition to teaching activities, the departments attach great importance to activities in scientific and research work, with active participation in a large number of national and international scientific projects. Special attention is given to the role of the department in international cooperation activities. Participation in international projects, study visits at foreign universities, organization of the international conference as well as interdepartmental international gatherings, a visit of colleagues from abroad to our faculty, and international exchange of doctoral students are some of the main activities of mentioned departments.

The Faculty of Economics has reactivated four centers:

Center for **Career Development,**

Center for **Business,**

Center for **International Cooperation,**

Center for **Statistical Analysis.**

Each of the mentioned centers has a specific role in achieving the mission of the Faculty of Economics, which is based on expanding and improving the knowledge and professional skills of students, and academic and professional staff, as well as better positioning of the faculty itself in the European area of higher education. In addition to the above, the faculty's mission is also focused on fostering a proactive and innovative approach to solving economic problems, which will result in strengthening the Montenegrin economy and raising its level of competitiveness and flexibility along with establishing strong and intense ties between the scientific research community and the business sector and placing the Faculty of Economics among modern international scientific educational institutions.

The Faculty has 13 classrooms, five of which are equipped with over 130 computers. The library was founded shortly after the establishment of the Faculty in 1960. Since its establishment, the library fund has been constantly renewed and expanded, both with textbooks needed for teaching and other literature. Currently, the library has 20,213 bibliographic units (titles), that is, a total fund of over 50,000 books (copies/inventory numbers). The increase in the library fund is contributed by the constant acquisition of new literature chosen by teachers, associates, and students of the Faculty.



LIST OF RESEARCHERS

FULL PROFESSORS

Baćović Maja
Ćetković Jasmina
Dedović Ljubinko
Đurović Gordana
Jaćimović Danijela
Jocović Mijat
Karadžić Vesna
Kaščelan Ljiljana
Kaščelan Vladimir
Lakić Slobodan
Lakićević Milan
Lalević Filipović Ana
Lazović Vujica
Melović Boban
Milović Nikola
Popović Saša
Radović Milivoje
Rondović Biljana

ASSOCIATE PROFESSORS

Jovović Milorad
Novović Burić Milijana

ASSISTANT PROFESSORS

Backović Tamara
Cerović Smolović Julija
Dragašević Zdenka
Đurašković Jovan
Đurišić Vladimir
Konatar Milena
Kuljak Mirjana
Laković Tanja
Lipovina Božović Milena
Mugoša Ana
Šehović Damir
Vujošević Saša

ASSOCIATES

PhD

Muhadinović Milica
Pejović Bojan
Radević Ivan

MSc

Ćirović Dragana
Jovović Jelena
Martinović Nikola
Mirotić Tanja
Mišnić Nikola
Popović Nemanja
Rogić Sunčica
Vukčević Milica

KEY FACTS (2021-2022)

Number of reserachers	43
Active PhD students	16
International projects	2
Co-publishing journals	2
Published monographs/books	5
Articles in international journals (SCI/SCIE/SSCI/A&HCI list)	57
Articles in international journals (not indexed in SCI/SCIE/SSCI/A&HCI list)	24
Chapters in international monographs studies	18
International conference articles	42



SCIENTIFIC RESEARCH PERSPECTIVE

The Faculty of Economics is dedicated to the constant improvement of scientific research work, and accordingly, for a long time, it has directed the teaching process towards the concept of lifelong learning, which represents the backbone of its future development. As part of the scientific and research activities of the Faculty, the teaching staff (professors and associates) are continuously focused on writing scientific and research articles, which are published in domestic and international journals, including those indexed in the most prestigious world databases.

In order to improve scientific research work, clear priorities have been defined that will be implemented in the coming period.

- **Access to eminent academic research databases**

The faculty will initiate a systematic approach to access the most important databases of scientific journals based on examples of best practices in the region and successful comparative experiences.

- **Exchange of ideas for writing articles, textbooks, or joint projects**

This process was started through the Economic Seminar project – an event that is organized on a monthly basis. The goal of this activity is to affirm the academic discussion on a certain topic, raise the quality of scientific papers, cooperation between members of different departments, and potentially publication of papers of a multidisciplinary nature.

- **Dissemination of published research**

Promoting the results of published research studies to the academic, professional, and lay public in order to point out the social contribution of research work and ensure the greater influence of scientific facts for the purpose of business and public decision-making.

- **Greater motivation of employees to publish papers in leading world journals**

The Faculty will, in cooperation with the University of Montenegro, encourage the research efforts of professors and associates in order to create conditions for a higher level of international recognition of the institution. The Faculty will organize training, workshops, and professional development for its researchers in order to adopt the new methodology and improve competencies in the field of scientific research work.

- **Strengthening scientific research, especially among young people**

The main goal of the education process is to develop students' creativity and their training for independent research. Professors will affirm research activities in economics, use the intellectual capacities of students, and certify research interest, curiosity, and creativity.

- **Building a strong and stable relationship with the business environment in Montenegro**

The database of associates of the Faculty of Economics from the public and private sectors today includes more than 70 partner institutions.

In order to improve the scientific environment, the Faculty of Economics will institute a new international conference – “**Montenegrin International Conference on Economics & Business**”. The first conference will be held from 25th – 27th May 2023 in Budva. The title of the conference is “**SUSTAINABLE DEVELOPMENT: TRANSITION TO GREEN ECONOMY**”. The conference is organized on the occasion of the 63rd anniversary of the Faculty of Economics. The mission of the conference is to initiate an academic and professional debate on the most important topics in the field of sustainable development, economic growth, and green economy. The intention is to get together renowned scientists and researchers, representatives of the international business community, and creators of economic policies, with the aim of affirming the best practice for creating an optimal environment that stimulates economic growth and development. The Faculty of Economics has rich intellectual capital and prestigious experience in the realization of similar events. At the conference organized in June 2014, the keynote speaker was the respected Nobel laureate prof. Oliver E. Williamson, and in September 2018, the respected Nobel laureate prof. Finn E. Kydland.



INTERNATIONAL PROJECTS

Faculty of Economics is currently working on two important projects funded with support from the Erasmus+ program.

Project acronym: **DUALMON**

Principal Investigator: **Boban Melović**

Funding Entity: **European Commission**

Project budget: **616,518.00 €**

Budget for the University: **251,370.00 €**

Project Timeframe: **2020-2023**

The title of the first project is “**DUALMON – Strengthening capacities for the implementation of dual education in Montenegro Higher Education**”. The topic of the project application is dual education. A dual training system is characterized by a combination of companybased and school-based learning which is aligned to the needs of the labour market in a particular way and which leads to qualifications in nationally recognised training occupations. During project it will be enhanced the relationship between the universities and companies. Universities will develop mechanisms and measures to increase participation in training and improve the companies’ ability to provide training for students. Also, very important issue will be a change in the interlinking of dual training with general education. Strategies and indicators for dual training will be introduced, and additional legislation will be developed. DUALMON consortium is constituted of the partners who are chosen on the basis of their competences, experience they have gained on similar projects and successful cooperation in the past. In the project implementation, 12 partners will take part. Partners are: University of Montenegro, University of Novi Sad from Serbia, FH Joanneum Gesellschaft M.B.H. from Austria, Academia from Slovenia, Ministry of Education and Agency for Control and Quality Assurance of Higher Education in Montenegro, and 6 influential representatives of enterprises in Montenegro – Chamber of Economy Montenegro, Crnogorska plovodba AD Kotor (ships building), Voli Trade d.o.o., Roaming Networks d.o.o., Hotels Group Montenegro Stars, and Crnogorski Telekom AD Podgorica.



Project acronym: **CEP**

Principal Investigator: **Danijela Jaćimović**

Funding Entity: **European Commission**

Project budget: **123,652.00 €**

Budget for the University: **98,821.60 €**

Project Timeframe: **2020 – 2023.**

The second Erasmus + project is “**Jean Monnet Center of Excellence: The Challenges of the Enlargement Policy: EU versus China’s diplomacy in Western Balkans**”. The time frame of the project is 2020-2023. The impact of the Centre of Excellence will be to foster debate about both enlargement and the effects of geopolitics among all actors in Montenegrin society, through the active engagement of local, EU and Chinese experts, that will contribute to the credibility of the discussion and debate. In this way, the Centre will contribute to the better resolution of important economic, national and foreign policy challenges, as well as other issues, that Montenegro will face in the process of its integration into the EU.



PUBLISHING

1. **Montenegrin Journal of Economics**

ISSN: 1800-5845

e-ISSN: 1800-6698

Founded: 2005

Language: English

Editor-in-Chief: Prof. Veselin Drašković, University of Montenegro

SCImago Journal Rank (SJR): 0.36 (Q2 in Economics, Econometrics and Finance)

Faculty of Economics is a co-publisher of an international scientific periodical – the *Montenegrin Journal of Economics*. The journal publishes theoretical, empirical and applicative articles from all the areas of Economics. The journal is issued quarterly – January, April, July and November. The format is print and online.

MJE is an open access journal which means that all content is freely available without charge to the user or his/her institution. Users are allowed to read, download, copy, distribute, print, search, or link to the full texts of the articles without asking prior permission from the publisher or the author. This is in accordance with the BOAI definition of open access. Montenegrin Journal of Economics has been accepted for indexing in the Emerging Sources Citation Index (2015).

Web: www.mnje.com

2. **Computer Science and Information Systems – ComSIS**

ISSN: 1820-0214

e-ISSN: 2406-1018

Founded: 2004

Language: English

Editor-in-Chief: Prof. Mirjana Ivanović, University of Novi Sad

SCImago Journal Rank (SJR): 0.35 (Q3 in Computer Science)

Faculty of Economics is a member of a ComSIS Consortium – as a group of leading scientific institutions from universities in Serbia and Montenegro who jointly publish the *Computer Science and Information Systems* journal.

ComSIS is an international refereed journal. The objective of ComSIS is to communicate important research and development results in the areas of computer science, software engineering, and information systems. ComSIS publishes original papers of lasting value covering both theoretical foundations of computer science and commercial, industrial, or educational aspects that provide new insights into design and implementation of software and information systems.

ComSIS is indexed in Science Citation Index (also known as SciSearch).

Web: www.comsis.org

EDITORIAL ACTIVITY

JOURNAL	PUBLISHER	EDITORIAL BOARD
Economic Analysis	Institute of Economic Sciences, Belgrade	Ana Mugoša Assistant Professor
Journal Marketing and Management of Innovations	Sumy State University, Ukraine	Boban Melović Full Profesor
International Journal of Economics, Management and Tourism	Goce Delchev University, North Macedonia	Boban Melović Full Profesor
Hotel and Tourism Management	Faculty for Hotel Management and Tourism, Vrnjacka Banja, Serbia	Boban Melović Full Profesor
Management & Economics Research Journal	Ziane Achour University of Djelfa, Algeria	Maja Baćović Full Professor
Computer Science and Information Systems – ComSis	ComSIS Consortium	Ljiljana Kaščelan Full Professor
Journal of Theoretical and Applied Electronic Commerce Research – JTAER	Faculty of Engineering of the Universidad de Talca, Chile	Ljiljana Kaščelan Full Professor

ECONOMIC SEMINAR

Starting from this academic year the Faculty of Economics will organize an **Economic Seminar** in an effort to promote the results, increase the quality and encourage scientific research work as well as to inspire academic discussion both in the academic community and in the general public. Economic Seminar will be organized on the third Wednesday of every month at 1:00 p.m. and it is scheduled to last an hour (30 minutes for the presentation and 30 minutes for the discussion).

The title of the research presented on the first Economic Seminar was “*Output Growth Decomposition and total factor productivity – methods and empirical results*” and it was held on October 12, 2022. Professor Maja Baćović presented the results of her scientific investigation as well as the findings of research implemented together with Assistant Professor Julija Cerović Smolović and Teaching Assistant Bojan Pejović. The aim of the analysis was the decomposition of the total production growth rate and production at the sectoral level (agriculture, industry, and services) into components obtained from the growth rate of capital, the growth rate of employment, and the growth rate of total factor productivity (labor utilization efficiency and capital). The main research methods were the arithmetic (accounting) and econometric methods.





The research results based on a sample of seven Balkan countries (Albania, Bulgaria, Bosnia and Herzegovina, North Macedonia, Montenegro, Serbia, and Romania), regarding the time frame from 2000 to 2017, was conducted with the aim of assessing the total factor productivity (TFP) growth in the overall economy and sector level (agriculture, industry, and services). Variations between output growth rates, TFP, capital, and labor contributions are observed not only across countries but also across sectors within each country. The highest growth of TFP for the whole economy was recorded in Romania, where the achieved average growth of production was 4.13%. In Montenegro, the average TFP growth rate grew in the previous decade, although it is still relatively low, while capital growth and capital utilization growth, along with employment growth, were the dominant sources of economic growth. Comparing economy-wide and sector-level average TFP growth rates for all economies in the sample, industry TFP growth is most highly correlated with total TFP growth and was positive in all countries from the research sample. The lowest productivity growth was achieved in the services sector. The service sector, on the other hand, was the generator of the highest employment growth.

The results of the studies, which were the topic of discussion at the first Economic Seminar, can be used in defining the priorities of national policies with reference to the fact that they prove the differences between sectors in terms of their impact on employment and economic growth.

FULL REFERENCE LIST (2021-2022)

1. MONOGRAPH STUDIES AND BOOKS

- **Baćović, Maja** (2022). *Ekonomija Crne Gore od 2006. do 2016. godine*. Univerzitet Crne Gore, Podgorica. (ISBN: 978-86-7664-223-6)

The monograph *Economy of Montenegro from 2006 to 2016* presents the basic economic trends and statistical indicators during the first decade of the state independence of Montenegro. With the restoration of independence at the referendum in 2006, Montenegro began an independent economic life, whose decades-long features and results have not been presented and analyzed in the form of a scientific monograph. The aim of the research is an empirical analysis of economic trends in the first ten years of state independence – in the 21st century. The main results of the research on economic performance in the period before 2006 are presented in the introductory part, which aims to give a brief overview of economic events in Montenegro in the period 1878-2006. In the third part of the monograph, a concise comparison of the trends of selected economic indicators in Montenegro and other countries of the former SFRY is presented. The appendix presents a detailed overview of selected statistical data, based on official statistical sources in Montenegro and the author's estimates where the indicators were not available, followed by a brief methodological overview.

- **Jocović, Mijat** (2022). *Pravo privrednih društava – Kompanijsko pravo*. Ekonomski fakultet Univerziteta Crne Gore, Podgorica.

The book *Law of commercial companies – Company law* was written on the basis of the author's several years of teaching experience in the legal group of subjects at the Faculty of Economics – University of Montenegro and performing other professional duties (consulting activities, cooperation with law firms, participation in the work of management structures in companies, writing laws, etc.). It represents a modest contribution to improving the teaching of the legal group of subjects at the Faculty of Economics in Podgorica as well as a good basis for students to acquire basic theoretical and practical knowledge from this scientific discipline. Bearing in mind the above, this book was written with two main goals. First, to describe and explain the basic concepts of company

law, which, according to the author, a graduate student of basic studies at the Faculty of Economics must know. And secondly, equally important, to encourage economics students to understand the meaning and importance of this branch of law for the development of the national economy. In addition to describing and explaining the institute of company law, the book also contains a significant number of examples from business and court practices, which should facilitate the mastering of the teaching content.

- **Lalević Filipović, Ana, Vukčević, Milica** (2022). *Osnove upravljačkog računovodstva*. Univerzitet Crne Gore, Podgorica.

Management accounting, due to its information importance, occupies a significant place in the curricula of many higher education institutions in the region and beyond. Until now, this type of concept, content, and idea that permeated the book, did not exist in the offer aimed at students of the Faculty of Economics. Therefore, the *Fundamentals of Management Accounting* book was created as a result of the need to bring, in an accessible and functional way, the material that belongs to the internal focus of the accounting information system of the company to students of the Faculty of Economics, University of Montenegro. The authors point out that, when designing the content of the book, they relied on the curriculum of the Management Accounting course, but they also focused on enriching the material with numerous pragmatic elements that will serve to better understand the subject. This is supported by the fact that each chapter, in addition to the theoretical review of a specific issue abounds with numerous examples, also incorporates an application segment – tasks with detailed explanations, tasks for self-testing knowledge, i.e., various problem questions. This concept within the chapters was initiated by the author's idea that after listening to the lectures and reading the pages of the book, students have the opportunity to test their knowledge independently, but also to acquire competencies that they will be able to functionally implement in practice. In the context of the above, the material given in the textbook is presented through eleven interconnected chapters. In the end, the authors point out that in the preparation of this textbook, they relied on diverse and contemporary research work in the field that is immanent to management accounting, believing that this kind of compilation of theoretical and practical elements of the subject will, in the best possible way, meet the expectations of those for whom it is primarily intended – to students.

- **Melović, Boban, Ćirović, Dragana, Dudić, Branislav** (2022). *Marketing Management on the organic products market – key concepts, new trends and experiences from Montenegro*. Prague, Wolters Kluwer.

The Monograph was created as a result of many years of experience in the field of management and marketing, with the aim of explaining the key concepts, trends, and principles of marketing management that are necessary for the organic products market. It incorporates both theoretical and empirical research, in which the authors base their arguments and recommendations on the unique integration of situational analysis of the observed market, theoretical postulates in marketing management, case studies, and empirical research results. The monograph consists of ten thematic areas, which, in addition to the usual marketing management categories, contain modern approaches to marketing management, such as brand management, guerrilla marketing, CRM, as well as some compatible units that are important for the field of organic production. The synthesis of the most important theoretical postulates in the field of marketing management and a compilation of modern postulates and concepts, which are further elaborated on practical examples, makes this monograph suitable for students, as well as for other scientists and researchers from the field. Also, this monograph is valuable for marketing-oriented entrepreneurs, giving them clear guidelines for developing and implementing a marketing strategy with the aim of improving their own business.

- **Radević, Ivan** (2021). *Knowledge Management and Organization: Healthcare Quality in Montenegro*. Lexington Books – Rowman & Littlefield Publishing Group, Inc. Maryland, USA. Hardback • 978-1-7936-4102-1. eBook • 978-1-7936-4103-8.

The book gives an insight into how the quality of health care may improve through the model of knowledge management and a multi-contingency approach to organizational design. The author assesses the relational triangle between knowledge management, organizational design, and the health system in Montenegro. Montenegrin health care system is presented through macroeconomic, managerial, and organizational-legal factors. The author focuses on the importance of knowledge management, leadership, organizational strategy, structure, culture, and climate of health organizations. The author's research covered public and private health institutions of Montenegro and included data collection from managers, union members, doctors, technicians, and finally, users of health services. A special part is dedicated to organizational challenges in the context of the COVID-19 pandemic. The author explains how political agenda confronted knowledge and profession and made Montenegro find itself in a downward spiral in its fight against the pandemic. An abundance of diverse approaches to the quality of health services – from the point of view of service providers and users, decision-makers and employees, management and trade union representatives, and private and public sectors, make the book stimulating and useful for professionals in health management, policymakers, patients, and the general audience.



2. ARTICLES

a) Articles published in international journals – SCI/SCIE/SSCI/A&HCI list

1. Andrijašević, Ž. & **Baćović, M.** (2022). Economic development of Montenegro from 1918 to 1990: the impact of political status and economic development model. *Southeast European and Black Sea Studies*, 22(2), 207-224.
2. Andrijašević, Ž. & **Baćović, M.** (2022). Is Income Convergence Possible with a Diminishing Industry's Output? Development Gap and Structural Changes in Montenegro since the World War II. *European Journal of Sustainable Development*, 11(1), 1-1.
3. Asmantaite, V., Dapkus, R., **Karadžić, V.**, Korneeva, E. & Ghauri, S. P. (2021). Sustainability Assessment of National Parks. *Transformations in Business & Economics*, Vol. 20, No. 1, p53-68.
4. **Baćović, M.** (2021). Total factor productivity growth in upper middle-income Balkan countries from 2000-2017, total economy and sectoral approach: growth accounting method. *Argumenta Oeconomica*, 1(46), 79-97.
5. **Baćović, M.**, Andrijašević, Ž. & **Cerović Smolović, J.** (2022). Structural changes and growth in Europe: are knowledge-intensive services changing paradigm of expansion of services as a long-term growth-diminishing factor?. *Ekonomický časopis*, 70(2), 124-143.
6. **Baćović, M.**, Andrijašević, Ž. & **Pejović, B.** (2022). Divergence between the Economies of the (Former) Yugoslav Republics: Is It Possible to Change Direction?. *Eastern European Economics*, 60(3), 265-284.
7. **Baćović, M.**, Andrijašević, Ž. & **Pejović, B.** (2022). STEM Education and Growth in Europe. *Journal of the Knowledge Economy*, 13(3), 2348-2371.
8. **Baćović, M.**, **Jaćimović, D.**, **Lipovina Božović, M.** & Ivanović, M. (2021). The Balkan Paradox: Are Wages and Labour Productivity Significant Determinants of FDI Inflows?. *Journal of Balkan and Near Eastern Studies*, 23(1), 144-162.
9. Bojaj, M., **Muhadinović, M.**, Bracanović, A., Mihailović, A., Radulović, M., Joličić, I. & Milačić, V. (2022). Forecasting macroeconomic effects of stablecoin adoption: A Bayesian approach. *Economic Modelling*, 109, 105792.
10. Bojaj M., **Đurović, G.**, Fabris, N., **Milović, N.** (2022). Top 1% and inequality connectedness in the EMU and WB. *International Review of Economics and Finance*, Vol.83, 139-155.
11. Burić, M., **Novović Burić, M.**, Jakšić Stojanović, A., **Kaščelan, Lj.** & Žugić, D. (2022). Sustainability of Online Teaching: The Case Study Mother Tongue Spelling Course at Montenegrin Universities. *Sustainability*, 14(21), 13717.
12. **Četković, J.**, Knežević, M., **Lakić, S.**, Žarković, M., Vujadinović, R., Živković, A. & Cvijović, J. (2022). Financial and Economic Investment Evaluation of Wastewater Treatment Plant. *Water*, 14(1), 122.
13. **Četković, J.**, **Lakić, S.**, Žarković, M., Vujadinović, R., Knežević, M., Živković, A. & Cvijović, J. (2022).

Environmental Benefits of Air Emission Reduction in the Waste Tire Management Practice. *Processes*, 10(4), 787.

14. **Ćetković, J., Lakić, S., Živković, A., Žarković, M. & Vujadinović, R.** (2021). Economic analysis of measures for GHG emission reduction. *Sustainability*, 13(4), 1712.
15. **Ćetković, J., Lakić, S., Žarković, M., Đurović, G., Vujadinović, R.** (2021). Application of Economic Analysis of Air Pollution Reduction Measures. *Polish Journal of Environmental Studies*. 30(1), 585–599.
16. Čizmović, M., **Mugoša, A., Kovačević, M. & Laković, T.** (2022). Effectiveness of tax policy changes in Montenegro: smoking behaviour by socio-economic status. *Tobacco Control* 2022. 0:1–9.
17. Colnar, S., **Radević, I., Martinović, N., Lojpur, A. & Dimovski, V.** (2022). The role of information communication technologies as a moderator of knowledge creation and knowledge sharing in improving the quality of healthcare services. *PloS one*, 17(8), e0272346.
18. **Dragašević, Z., Milović, N., Đurišić, V. & Backović, T.** (2021). Analyzing the factors influencing the formation of the price of electricity in the deregulated markets of developing countries. *Energy Reports*, 7, 937-949.
19. **Đurašković, J., Konatar, M. & Radović, M.** (2021). Renewable energy in the Western Balkans: Policies, developments and perspectives. *Energy Reports*, 7, 481-490.
20. Gričar, S., Bojnec, Š., **Karadžić, V. & Backović Vulić, T.** (2021). Tourism-led economic growth in Montenegro and Slovenia. *Economic Research-Ekonomska Istraživanja*, 1-33.
21. Gričar, S., Bojnec, Š., **Karadžić, V. & Backović, T.** (2022). Tourism price normalities in two Adriatic east coast'euro'countries. *Economic Research-Ekonomska Istraživanja*, 35(1), 4865-4883.
22. Horvat, A. M., Dudić, B., Radovanov, B., **Melović, B., Sedlak, O. & Davidekova, M.** (2021). Binary Programming Model for Rostering Ambulance Crew – Relevance for the Management and Business. *Mathematics*, 9(1), 64.
23. **Karadžić, V. & Pejović, B.** (2021). Inflation Forecasting in the Western Balkans and EU: A Comparison of Holt-Winters, ARIMA and NNAR Models. *Amfiteatru Econ*, 23(57), 517-532.
24. **Konatar, M., Kaštelan, S., Kaštelan, U., Đurašković, J. & Radović, M.** (2021). What drives health-care expenditure growth?: evidence from central and eastern European economies. *Ekonomický časopis*, 69(7), 750-765.
25. **Lakić, S., Ćetković, J., Pejović, B., Žarković, M. & Knežević, M.** (2022). Economic Growth Determinants in South-East European Countries: A System Generalized Method of Moments Approach. *East European Politics and Societies*, 36(3), 935-956.
26. Lamovšek, A., Černe, M., **Radević, I. & Božič, K.** (2022). The Key to Work–Life Balance is (Enriched) Job Design? Three-Way Interaction Effects with Formalization and Adaptive Personality Characteristics. *Applied research in quality of life*, 1-30.
27. **Lazović, V., Jovović, M., Backović, T., Đuričković, T. & Rondović, B.** (2022). Is Digital Economy a Good Samaritan to Developing Countries?. *Sustainability*, 14(14), 8471.

28. **Lazović, V., Rondović, B.,** Lazović, D. & Đuričković, T. (2021). Is Economic Theory, Presented in Basic Academic Textbooks, Applicable to the Digital Economy?. *Sustainability*, 13(22), 12705.
29. Marić, M., Subotić, M., Dudić, B., **Melović, B.,** Branković, N. & Milisavljević, S. (2021). Evaluating Relations between Originality, Efficiency, Conformism and Entrepreneurial Potential of Students in a Fast Changing Business Environment. *Sustainability*, 13(4), 1593.
30. **Melović, B.,** Dabić, M., **Vukčević, M., Ćirović, D. & Backović, T.** (2021). Strategic business decision making: the use and relevance of marketing metrics and knowledge management. *Journal of Knowledge Management*, Vol. 25 No. 11, pp. 175-202.
31. **Melović, B., Šehović, D., Karadžić, V.,** Dabić, M. & **Ćirović, D.** (2021). Determinants of Millennials' behavior in online shopping—Implications on consumers' satisfaction and e-business development. *Technology in society*, 65, 101561.
32. **Melović, B.,** Veljković, S. M., **Ćirović, D., Vulić, T. B. &** Dabić, M. (2022). Entrepreneurial decision-making perspectives in transition economies—tendencies towards risky/rational decision-making. *International Entrepreneurship and Management Journal*, 1-35.
33. **Melović, B., Vukčević, M. &** Dabić, M. (2021). The Midas touch of branding: banks' brand value, intellectual capital and the optimization of the Interbrand methodology. *Journal of Intellectual Capital*. Vol. 22 No. 7, pp. 92-120.
34. Mihailović, A., **Cerović Smolović, J., Radević, I.,** Rašović, N. & **Martinović, N.** (2021). COVID-19 and Beyond: Employee Perceptions of the Efficiency of Teleworking and Its Cybersecurity Implications. *Sustainability*, 13(12), 6750.
35. **Mišnić, N., Pejović, B., Jovović, J., Rogić, S. & Đurišić, V.** (2022). The Economic Viability of PV Power Plant Based on a Neural Network Model of Electricity Prices Forecast: A Case of a Developing Market. *Energies*, 15(17), 6219.
36. Mitrašević, M., Pjanić, M. & **Burić Novović, M.** (2022). Relationship between Insurance Market and Economic Growth in the European Union. *Politická ekonomie*, 2022(4), 395-420.
37. **Mugoša, A. & Popović, S.** (2021). Deviation from target capital structure as a factor of acquisition decisions in European developed markets. *Argumenta Oeconomica*, 46(1), 53-78.
38. **Muhadinović, M., Đurović, G. &** Bojaj, M. (2021). Forecasting Greenhouse Gas Emissions and Sustainable Growth in Montenegro: a SVAR Approach. *Polish Journal of Environmental Studies*, 30(5), 4115-4129.
39. **Novović Burić, M.,** Jakšić Stojanović, A., **Lalević Filipović, A. & Kaščelan, Lj.** (2022). Research of Attitudes toward Implementation of Green Accounting in Tourism Industry in Montenegro—Practices, and Challenges. *Sustainability*, 14(3), 1725.
40. **Novović Burić, M., Kaščelan, Lj. & Kaščelan, V.** (2021). Economic and demographic determinants of premium reserve in Western Balkan countries during and after the crisis. *International Journal of Finance & Economics*, 1-21.
41. **Pejović, B., Karadžić, V., Dragašević, Z. & Backović, T.** (2021). Economic growth, energy con-

- sumption and CO2 emissions in the countries of the European Union and the Western Balkans. *Energy Reports*, 7, 2775-2783.
42. Prašnikar, J., Bole, V., Dominko, M., **Lakićević, M.** & Oblak, A. (2021). Disentangling external flows (external shocks) and policy effects on the credit activities of banks in three emerging countries during the Great Recession. *Journal of Balkan and Near Eastern Studies*, 23(1), 78-100.
43. **Radević, I.**, Alfirević, N. & **Lojpur, A.** (2022). Corruption, public trust and medical autonomy in the public health sector of Montenegro: Taking stock of the COVID-19 influence. *PloS one*, 17(9), e0274318.
44. **Radević, I.**, Dimovski, V., **Lojpur, A.** & Colnar, S. (2021). Quality of healthcare services in focus: the role of knowledge transfer, hierarchical organizational structure and trust. *Knowledge Management Research & Practice*, 1-12.
45. **Rogić, S.** & **Kaščelan, Lj.** (2021). Class Balancing in Customer Segments Classification Using Support Vector Machine Rule Extraction and Ensemble Learning. *Computer Science and Information Systems*, 18(3), 893-925.
46. **Rogić, S.**, **Kaščelan, Lj.** & Pejić Bach, M. (2022). Customer Response Model in Direct Marketing: Solving the Problem of Unbalanced Dataset with a Balanced Support Vector Machine. *Journal of Theoretical and Applied Electronic Commerce Research*, 17(3), 1003-1018.
47. **Rogić, S.**, **Kaščelan, Lj.**, **Kaščelan, V.** & **Đurišić, V.** (2022). Automatic customer targeting: a data mining solution to the problem of asymmetric profitability distribution. *Information Technology and Management*, 1-19.
48. Sindik, D.V., **Kaščelan, V.**, **Kaščelan, Lj.** (2022). Simulation of disequilibrium and chaos in aggregates of disposable income, wealth, and consumption in EU macroeconomics using nonlinear dynamic analysis. *Simulation*. 00375497221130100
49. Sćekić, R., **Lakić, S.** & Pejanović, A. (2021). Politics and new media in ex/communist states—the example of Montenegro. *Kybernetes*. Vol. 51 No. 1, pp. 383-402.
50. **Šehović, D.**, **Konatar, M.**, **Smolović, J. C.** & **Đurašković, J.** (2021). Socioeconomic Determinants of Local Fiscal Success—The Case of Montenegrin Municipalities. *Lex Localis*, 19(3), 689-703.
51. Szymkowiak, A., **Melović, B.**, Dabić, M., Jeganathan, K. & Kundi, G. S. (2021). Information technology and Gen Z: The role of teachers, the internet, and technology in the education of young people. *Technology in Society*, 65, 101565.
52. Vojinović, T., **Kaščelan, Lj.**, Potpara, Z., Radonjić, N. & Kaščelan, Z. (2022). Improving Structure Based Models For Predicting Chemical Functions And Weight Fractions In Cosmetic Products Using Ensemble Support Vector Machine. *Farmacia*, Vol. 70, 2.
53. **Vujošević, S.**, Popivoda, G., Vukićević, Ž. K., Furtula, B. & Škrekovski, R. (2021). Arithmetic–geometric index and its relations with geometric–arithmetic index. *Applied Mathematics and Computation*, 391, 125706.
54. Vukićević, Ž. K., **Vujošević, S.** & Popivoda, G. (2021). Unicyclic graphs with extremal values of

arithmetic–geometric index. *Discrete Applied Mathematics*, 302, 67-75.

55. Zahmani, Z., **Jovović, M.**, Redžepagić, S. & Siničáková, M. (2021). Substitution of anchor currency: challenges for trade between Iran and its major trading partners. *Technological and Economic Development of Economy*, 27(4), 833-851.
56. Žarković, M., **Četković, J.**, Redžepagić, S., **Đurović, G.**, Vujadinović, R., Živković, A. (2022). Economic growth determinants in new and old EU countries with focus on construction. *Technological and Economic Development of Economy*, 1-27.
57. Žarković, M., **Lakić, S.**, **Četković, J.**, **Pejović, B.**, Redžepagić, S., Vodenska, I. & Vujadinović, R. (2022). Effects of Renewable and Non-Renewable Energy Consumption, GHG, ICT on Sustainable Economic Growth: Evidence from Old and New EU Countries. *Sustainability*, 14(15), 9662.

b) Articles published in international journals (not indexed in SCI/SCIE/SSCI/A&HCI list)

58. **Baćović, M.** (2021). Domestic vs Foreign Direct Investment, Economic Growth and Productivity in Southeast Europe. *Academia Letters*, article 3757, str. 1-10.
59. **Baćović, M.** (2021). Exports of services, output and productivity growth in Europe. *Asian Development Policy Review*, 9(4), 209-219.
60. **Baćović, M.** (2021). Public Debt and Economic Growth: Two Public Debt Management Scenarios in Montenegro. In *BH Economic forum*, Vol. 14, No. 1, pp. 89-115.
61. **Baćović, M.** (2021). Sectoral Approach in Output Growth Decomposition and its Determinants in Europe. *Management & Economics Research Journal*, 3(2), str. 1-21.
62. **Baćović, M.**, **Pejović, B.**, **Mirotić, T.** (2021). Quality of Education and Economic Growth. *International Academic Journal*, 2(1), ISSN 2671-3748, str. 14-25.
63. **Burić, M. N.**, Raičević, M., **Kaščelan, Lj.** & **Kaščelan, V.** (2022). Socio-Demographic Impacts on the Personal Savings Portfolio Choice: A Decision Tree Approach. *International Journal of Business Analytics* (IJBAN), 9(1), 1-23.
64. Gričar, S., Bojnec, S., **Karadžić, V.**, **Backović, T.** (2022). Three Decades of Macroeconomic Flux in Montenegro and Slovenia. *Montenegrin Journal of Economics*, Vol. 18, No. 2, pp. 61-71.
65. **Đurović, G.** (2022). Regional economic integration of the Western Balkans: from the CEFTA 2006 towards the EU single market. *Diplomacy Journal*, Issue 28, Bulgarian Diplomatic Institute, Sophia.
66. **Đurović, G.** (2022). War in Ukraine and implications for Montenegro's EU Membership. *ACM Briefs*, Atlantic Council of Montenegro.
67. **Karadžić, V.**, **Backović, T.** & Streimikis, J. (2021). Relevance of Okun's Law in Montenegro. *Montenegrin Journal of Economics*, 17(1), 59-69.
68. **Karadžić, V.**, Đalović, N. (2021). Profitability Determinants of Big European Banks. *Journal of Central Banking Theory and Practice*, Vol. 10, No. 2, 39-56.

69. **Lojpur, A., Radević, I. & Martinović, N.** (2021). "Second curve" concept as a key driver of economic development in the emerging markets. *Management: Journal of Contemporary Management Issues*, 26(Special Issue), 101-119.
70. **Melović, B., Šekularac-Ivošević, S., Muslu, A., Backović, T. & Dabić, M.** (2022). Proactive Career Planning in the Maritime Industry: Enhancing Millennials' Workplace Enthusiasm in Montenegro and Turkey. *NAŠE MORE: znanstveni časopis za more i pomorstvo*, 69(1), 40-52.
71. **Milović, N., Jocović, M. & Martinović, N.** (2021). Analysis of the Impact of Macroeconomic Stability on the Level of Global Competitiveness of Western Balkan Countries. *Journal of Central Banking Theory and Practice*, 2, 23-37.
72. **Pejović, B. & Zarić, S.** (2021). Assessing the Dependence of the Balkan Countries on the Tourism Economy: The AHP Approach. *Knowledge-International Journal*, 46(1), 17-22.
73. **Popović, M. & Radević, I.** (2022). New and old dual economy. *Management: Journal of Contemporary Management Issues*, 27(1), 63-81.
74. **Randelović, S. & Martinović, N.** (2022). National Competitiveness and Foreign Direct Investment in Emerging Europe. *Economic Themes*, 60(1), 21-40.
75. **Rogić, S. & Kaščelan, Lj.** (2021). Segmentation Approach for Athleisure and Performance Sport Retailers Based on Data Mining Techniques. *International Journal of E-Services and Mobile Applications (IJESMA)*, 13(3), 71-85.
76. **Rogić, S., Vukčević, M., Muhadinović, M. & Smolović, J. C.** (2022). Montenegrin Sport Associations on Social Media-Quality of Performance Assessment. *Sport Mont*, 20(1), 9-14.
77. **Tomašević, J., Burić, M. N., Kaščelan, Lj. & Kaščelan, V.** (2021). Impact of premium reserve on Life insurance investments in the Western Balkans. *Serbian Journal of Management*, 16(2).
78. **Tomić, M., Antonijević, M. & Pejović, B.** (2021). Uticaj pandemije COVID-19 na kretanje SDI: iskustva Srbije. *Ekonomске ideje i praksa*, (42), 47-72.
79. **Tomić, M., Uremović, N., Antonijević, M. & Pejović, B.** (2022). Export Diversification in the CEFTA 2006 Region. A "U" Shape Pattern. *Knowledge-International Journal*, 51(1), 95-99.
80. **Vujošević, S.** (2022). Computation of edge Pi index, vertex Pi index and Szeged index of some cactus chains. *MATHEMATICA MONTISNIGRI*, Vol LIV.
81. **Vujošević, S., Poljašević, J., Lakićević, M.** (2022). Application of graph theory for the purpose of diversifying the portfolio of stocks on the Banja Luka stock exchange. *Financing – scientific magazine for economy*. ISSUE 2022, No. 2, Article 1.

c) Chapters in international monograph studies

82. **Baćović, M.** (2022). Pension system and reforms in Montenegro. In: *Social Security in the Balkans (volume 2): An Overview of Social Policy in the Republics of North Macedonia and Montenegro*, edited by: Žakowska, M. and Domalewska, D., Brill, pp. 109-151.

83. Baynazoğlu, M. E. & **Melović, B.** (2021). Effects of COVID-19 on tourism investments. In: *COVID-19 and the Hospitality and Tourism Industry*, 116-130, Edward Elgar Publishing.
84. **Đurović, G., Muhadinović, M., et al.** (2022). *Regional economic cooperation in V4 and WB6: sharing experience and knowledge in the context of Common Regional Market and post-COVID recovery*, Montenegrin Pan-European Union, Podgorica, ISBN 978-9940-8846-0-4, CO-BIS.CG-ID 22434820; (e-book and book).
85. **Konatar, M. & Đurašković, J.** (2022). Montenegro – Economy, In: *Central and South-Eastern Europe 2023 – 23rd Edition*, Routledge, London.
86. **Martinović, N. & Milović, N.** (2022). Montenegro and BRI Initiative: Between Economic Performance and Global Political Challenges. In: *Opportunities and Challenges for Multinational Enterprises and Foreign Direct Investment in the Belt and Road Initiative*. IGI Global. pp. 217-233.
87. **Melović, B., Ćirović, D., Vukčević, M. & Stojanović Jakšić, A.** (2021). Behavior of Older Consumers in the Digital Age and Creating Marketing Strategies: Mature Population as Part of Customer 4.0. In: *Handbook of Research on Economic and Social Impacts of Population Aging*, 17-38, IGI Global.
88. **Melović, B., Veljković, S. M., Ćirović, D. & Radojičić, I. D.** (2021). Managerial Decision-Making Process in the Modern Business Conditions in the EU: Importance of Cultural Influence. In: *Handbook of Research on Social and Economic Development in the European Union*, 324-348, IGI Global.
89. **Milović, N. & Martinović, N.** (2021). SEE-6 Economic Outlook- Montenegro. Vol 7, No 1-2, Institute of Economic Sciences Belgrade.
90. **Milović, N. & Martinović, N.** (2022). SEE-6 Economic Outlook – Montenegro. Vol 8, No 1, Institute of Economic Sciences Belgrade.
91. **Novović Burić, M., Jakšić-Stojanović, A.** (2022). Digitalization of the Operations of Insurance Companies with Special Reference to the Financial Reporting of Insurers in Montenegro. In: *New Technologies, Development and Application V. NT 2022. Lecture Notes in Networks and Systems*, Karabegović, I., Kovačević, A., Mandžuka, S. (eds), Vol. 472. Springer, Cham. https://doi.org/10.1007/978-3-031-05230-9_118.
92. **Novović Burić, M., Lalević Filipović, A., Jakšić-Stojanović, A.** (2022). Green Accounting with Special Reference to Montenegro. In: *New Technologies, Development and Application V. NT 2022. Lecture Notes in Networks and Systems*, Karabegović, I., Kovačević, A., Mandžuka, S. (eds). Vol. 472. Springer, Cham. https://doi.org/10.1007/978-3-031-05230-9_120.
93. **Novović Burić, M., Lalević Filipović, A., Kaščelan, Lj., Kaščelan, V.** (2021). Impact of the COVID-19 Pandemic on the Montenegrin insurance market. In: *Contemporary Challenges and Sustainability of the Insurance Industry*, Kočović J., Jovanović Gavrilović, B., Boričić, B., Koprivica M.. Chapter 8, pp. 125-139, Faculty of Economics Belgrade, ISBN: 978-86-403-1693-4.
94. **Radović, M., Konatar, M., Đurašković, J., Popović, N.** (2022). Covid-19 Pandemic and Montene-

grin Economy: impacts, policy responses and Implications. In: *"ECONOMIC AND FINANCIAL IMPLICATIONS OF COVID-19 CRISES"*, Eds. Redžepagić, Duarte, Siničáková and Bodroža, published by Balkan Institute of Science and Innovation, Université Côte d'Azur, Nice, France. ISBN 978-2-493478-00-9.

95. Raičević, M., **Lalević Filipović, A.**, **Novović Burić, M.**, **Kaščelan, V.** (2022). Green concept in Montenegro with the focus on Environmental insurance. In: *Development of Modern Insurance Market – Constraints and Possibilities*, Kočović J., Jovanović Gavrilović B., Stojanović, Ž., Mladenović, Z., Trifunović, D., Koprivica M. (eds.), Chapter 9, pp. 159-177, Faculty of Economics Belgrade, ISBN: 978-86-403-1739-9.
96. Raut, J., Mitrović Veljković, S., **Melović, B.**, Ribarić Čučković, E. & Ćelić, Đ. (2022). Analysis of Influential Elements of Entrepreneurial Ecosystems. In: *Industrial Innovation in Digital Age*, 120-127, Springer, Cham.
97. **Rogić, S.** & **Kaščelan, Lj.** (2022). Customer Response Modeling Using Ensemble of Balanced Classifiers: Significance of Web Metrics. In: *Science and Information Conference*. pp. 433-448. Springer, Cham.
98. **Rogić, S.**, **Kaščelan, Lj.** & **Đurišić, V.** (2022). Estimating Customers' Profitability: Influence of RFM Attributes. Web Metrics and Product Data. In: *Marketing and Smart Technologies*. pp. 293-304. Springer, Singapore.
99. Stojanović Jakšić, A. & **Melović, B.** (2022). National Park Tourism. In: *Encyclopedia of Tourism Management and Marketing*, 287-290. Edward Elgar Publishing.

d) **International conference articles**

100. **Baćović, M.** (2021). Productivity growth and its determinants in Western Balkan countries. *12th SCF international conference – Contemporary issues in social sciences*. Antalya, Turkey, ISBN: 978-605-74234-4-3 (e-book), pp. 42-59.
101. **Baćović, M.**, **Backović, T.**, **Milović, N.** (2022). Research and innovation performance of Western Balkan countries. *IFKAD 2022: Knowledge Drivers for Resilience and Transformation*. Lugano, Switzerland, ISBN: 978-88-96687-15-4 (e-book). pp. 457-474.
102. **Baćović, M.**, **Pejović, B.**, **Mirotić, T.** (2021). Quality of Education and Economic Growth. *International Virtual Academic Conference: Education and Social Sciences Business and Economics*, pp. 6. ISBN 978-608-4881-22-3.
103. Đukanović, M., **Rogić, S.**, Novičević, L., Popović-Bugarin, V. & Jovanović, M. (2022). Application of Apriori Algorithm for CRM Improvement – Case Study from Montenegro. *International Conference on Computer Technology Applications (ICCTA2022)*. Vienna, Austria.
104. **Đurašković, J.**, **Konatar, M.** & **Radović, M.** (2021). The Western Balkans Caught in a Globalization Trap?. *8th REDETE Conference RESEARCHING ECONOMIC DEVELOPMENT AND ENTE-*

PRENEURSHIP IN TRANSITION ECONOMIES Geopolitics and the Political Economy of Conflict in the Balkans and the Eastern Mediterranean: Refugees, Energy Sector and Prospects for the Future. Niš, Serbia.

105. **Đurašković, J., Popović, N.** (2021). Trendovi na crnogorskom tržištu rada sa akcentom na period krize Covid-19. *Međunarodna naučna konferencija – Značaj Mini Šengena za evrointegracije Zapadnog Balkana*. Univerzitet u Prištini, Ekonomski fakultet u Kosovskoj Mitrovici.
106. **Đurović, G.** (2022). Tri decenije tranzicije u Crnoj Gori: ekonomski aspekti i periodizacija, *Changes – International Scientific Conference*, Institut društvenih nauka, Beograd. ISBN: 978-86-7093-257-9.
107. **Jaćimović, D.,** Tianping, K., Man, J., **Milović, N.** & Mišćević, T. (2021). The EU, China and the Western Balkans: The Challenges and Prospects of Further Integration. *8th REDETE Conference RESEARCHING ECONOMIC DEVELOPMENT AND ENTREPRENEURSHIP IN TRANSITION ECONOMIES Geopolitics and the Political Economy of Conflict in the Balkans and the Eastern Mediterranean: Refugees, Energy Sector and Prospects for the Future.* Niš, Serbia.
108. Jovičić, D., **Novović Burić, M.** (2021). Utvrđivanje adekvatnosti tehničkih rezervi neživotnih osiguranja u skladu sa MSFI 4 i režimom solventnosti. *Finansijsko računovodstvene inovacije u funkciji pouzdanog finansijskog izvještavanja, XVI Međunarodni kongres računovođa i revizora Crne Gore, Zbornik radova*, str.119-137.
109. **Jovović, M. & Mišnić, N.** (2022). Employee attitudes in Montenegro in the new business environment – comparison between private and public sector. *International Conference: Digitalization and Sustainability – New Environment for Economics and Business – 85th Anniversary conference.* University of Belgrade, Faculty of Economics and Business.
110. **Kaščelan, Lj. & Rogić, S.** (2022). Data Analytics for Marketing Knowledge Advancement: a Market Segmentation Example Using Support Vector Machine. *17th International Forum on Knowledge Asset Dynamics (IFKAD2022).* Lugano, Switzerland.
111. **Konatar, M., Radović, M.,** Peković, Z. (2021). Javni dug i ekonomske performanse u zemljama Zapadnog Balkana. *Međunarodna naučna konferencija – Značaj Mini Šengena za evrointegracije Zapadnog Balkana*. Univerzitet u Prištini, Ekonomski fakultet u Kosovskoj Mitrovici.
112. **Lakić S., Četković J., Šehović D.** (2022). Relevance of assumptions in market modelling – specification of a financial firm. *International conference BELECON*, Belgrade Business and Arts Academy of Applied Studies.
113. **Lakić, S.,** Živković, A. & **Pejović, B.** (2022). Analysis of Aggregate Demand Determinants in SEE Countries: A Panel ARDL Approach. *Digitalization and Sustainability – New Environment for Economics and Business.* Faculty of Economics, University of Belgrade.
114. **Lalević Filipović, A. & Vukčević, M.** (2021). Analiza računovodstvene pismenosti studenata u Crnoj Gori, *Računovodstvena znanja kao činilac ekonomskog i društvenog napretka.* Ekonomski fakultet Univerziteta u Kragujevcu, Srbija. 422-435, ISBN 978-86-6091-118-8.

115. **Lalević Filipović, A., Novović Burić, M., Jovičić, D.** (2022). Regulatorni okvir nefinansijskog izvještavanja u funkciji podsticanja održivih finansija. *Prouzrokovanje štete, naknada štete i osiguranje. XXV Međunarodna naučna konferencija*. Institut za uporedno pravo, Udruženje za odštetno pravo i Pravosudna akademija iz Beograda, Zbornik radova, str.523-539.
116. Lamovšek, A., Černe, M, **Radević, I.** & Božič, K. (2022). Three-way interaction effect of enriched job design, formalization and individual characteristics on work-life balance. V: *20th EAWOP Congress*. Glasgow, Scotland: programme. [S. l.]: European Association of Work and Organizational Psychology (EAWOP).
117. Lamovšek, A., **Radević, I.** & Božič, K. (2022). Enriched Job Design, Formalization and Adaptive Personality Predicting WLB: A Three-way Interaction. *Academy of Management annual meeting proceedings*.
118. **Lazović, V.,** Bobek, S., **Rondović, B.,** Đuričković, T. (2022). Regulation of The Digital Market in Post-Covid Times. *6th FEB International Scientific Conference*, 75.
119. **Lipovina-Božović, M.,** Femić-Radosavović, B., **Pejović, B.** (2022). Linking Innovation Performance and Economic Growth in OECD Countries. *Digitalization and Sustainability – New Environment for Economics and Business*. Faculty of Economics, University of Belgrade.
120. **Lojpur, A., Lalević Filipović, A. & Vukčević, M.** (2022). Na putu od digitalne transformacije do digitalnog totalitarizma – da li će biti mjesta za računovođe kakve poznajemo?, *26. Međunarodni kongres računovodstvene i revizorske profesije Republike Srpske: Računovodstvo, revizija i finansije u uslovima nove normalnosti, digitalizacije i „zelene“ tranzicije*. Banja Vrućica, BIH. ISBN 978-99976-620-9-5.
121. **Melović, B.** (2022). Digitalization and sustainability as megatrends in marketing management – a perspective in the modern business environment. *International Conference: Digitalization and Sustainability – New Environment for Economics and Business – 85th Anniversary conference*. University of Belgrade, Faculty of Economics and Business.
122. **Melović, B., Ćirović, D., Vukčević, M.** (2022). Dual Higher Education In Montenegro – Opportunities and Challenges. *7th Conference „MAINTENANCE 2022“*. Budva, Montenegro.
123. **Melović, B., Ćirović, D., Vukčević, M.,** Veljković, S. M. (2022). Marketing na društvenim mrežama – ocjena online nastupa nosilaca ponude agroturizma u Crnoj Gori primjenom FAI metodologije. *XI Scientific Conference With International Participation – Jahorina Business Forum 2022*. Jahorina, BiH.
124. **Melović, B.,** Veljković, S. M., **Ćirović, D. & Vukčević, M.** (2021). Uticaj pandemije Covid-19 na poslovanje mikro, malih i srednjih preduzeća u Crnoj Gori. *X Scientific Conference With International Participation – Jahorina Business Forum 2021*. Jahorina, BiH.
125. **Milović, N. & Martinović, N.** (2022). Euro and Montenegro through a two-decade perspective – opportunities and challenges to meet growing economic uncertainty. *85th Anniversary conference – Digitalization and Sustainability – New Environment for Economics and Business*. University of Belgrade.

126. **Milović, N. & Martinović, N.** (2022). Research and Development expenditure and its impact on economic performances of WB countries. *Third International Interdepartmental Scientific Conference – Shaping Post COVID World – Challenges for Economic Theory and Policy*. University of Belgrade.
127. **Mugoša, A., Čizmović, M. & Kovačević, M.** (2022). Distributional Impacts of Tobacco Tax in Montenegro. Tobacco Prevention & Cessation (Book of abstracts), *ENSP 7th European Conference on Tobacco Control Heraklion*. Crete, Greece.
128. **Novović Burić, M., Racković J.** (2021). Komparativna analiza poznavanja računovodstvene teorije i prakse – osvrt na Crnu Goru, Srbiju i Bosnu i Hercegovinu, *Računovodstvena znanja kao činilac ekonomskog i društvenog napretka, Zbornik radova*. Ekonomski fakultet u Kragujevcu, Srbija.
129. **Pejović, B.** (2021). The Impact of Globalization on Economic Growth in Transition Countries. *III International Science Conference SER*.
130. **Pejović, B., Zarić, S.** (2021). Assessing the Dependence of the Balkan Countries on the Tourism Economy: the AHP Approach. *International Scientific Conference – The Teacher of the Future*. Budva, Montenegro.
131. **Popović, N., Đurašković, J., Radović, M., Konatar, M.** (2022). Commodity reserves system as a stabilization mechanism in crisis conditions – the case of Montenegro. *85th Anniversary conference – Digitalization and Sustainability – New Environment for Economics and Business*. University of Belgrade, ISBN 978-86-403-1752-8.
132. Racković, J., **Novović Burić, M.** (2021). Studentska percepcija značaja računovodstva: komparativna analiza nivoa znanja s osvrtom na Crnu Goru, Srbiju i Bosnu i Hercegovinu. *Finansijsko računovodstvene inovacije u funkciji pouzdanog finansijskog izvještavanja, XVI Međunarodni kongres računovođa i revizora Crne Gore, Zbornik radova*, str.327-341.
133. **Radović, M., Popović, N., Đurašković, J., Konatar, M., Božović, M.** (2022). Analysis of key indicators of the Montenegrin Economy during the Covid-19 crisis. *Third International Interdepartmental Scientific Conference – Shaping Post COVID World – Challenges for Economic Theory and Policy*. University of Belgrade, ISBN: 978-86-403-1749-8.
134. Raičević, M. & **Kaščelan, V.** (2021). Solventnost II i MSFI 17: sličnosti i razlike. *XVI Međunarodni kongres računovođa i revizora Crne Gore: Finansijsko-računovodstvene inovacije u funkciji pouzdanog finansijskog izvještavanja*. Bečići, Budva, 369-381.
135. Raut, J., Mitrović Veljković S., **Melović, B., Čelić Đ.** (2021). Primena inovativnih metoda i tehnika u izvođenju online nastave. *XXVII skup Trendovi razvoja: "Online nastava na univerzitetima"*. Univerzitet u Novom Sadu, Fakultet tehničkih nauka, 83-86, ISBN 978-86-6022-613-7.
136. Raut, J., Mitrović Veljković S., **Melović, B., Čelić, Đ. & Nikolić, D.** (2022). Preduzetnički ekosistem kao novi koncept preduzetništva. *XXVIII skup Trendovi razvoja: "Univerzitetsko obrazovanje za privredu"*. Kopaonik, 382-385, ISBN 978-86-6022-401-1.

137. **Rogić, S. & Kaščelan, Lj.** (2021). Class Balancing in Customer Segments Classification Using Support Vector Machine Rule Extraction and Ensemble Learning. *6th Analytics Without Borders Conference 2021*. Center for Analytics and Data Science-Data Analytics Research Team (CADS-DART). Bentley University / Virtual Conference.
138. **Rogić, S. & Kaščelan, Lj.** (2022). Customer Response Modeling for Direct Marketing Using Ensemble of Balanced Classifiers: Influence of Web Metrics on the Model Performance. *Computing Conference 2022*. London, United Kingdom.
139. **Rogić, S., Kaščelan, Lj. & Đurišić, V.** (2021). Estimating Respondents' Profitability: Influence of RFM Attributes, Web Metrics and Product Data. *International Conference on Marketing and Technologies 2021 (ICMarkTech21)*. Tenerife, Spain.
140. **Rogić, S., Vukčević, M., Muhadinović, M. & Cerović Smolović, J.** (2021). Montenegrin Sport Associations on Social Media – Quality of Performance Assessment. *18th annual Scientific Conference – Sport, Physical Activity and Health: Contemporary Perspectives 2021*. Cavtat, Croatia.
141. **Vukčević, M., Čirović, D.** (2022). Uloga i značaj društveno-odgovornog poslovanja – percepcija mladih iz Crne Gore. *Računovodstveni naučni skup: Računovodstvena znanja kao činilac ekonomskog i društvenog napretka*. Ekonomski fakultet Univerziteta u Kragujevcu, Kragujevac, Srbija.




APPENDIX

naesto
danje

Ekonomija

Samuelson
Nordhaus



Ekonomije i Ekonomija

Dr Branko Medojević
Dr Milovan Pavlović

Dr Dragoljub Dragišić
Dr Bogdan Ilić

Blagoje S. Babić Ekonomija Azije

Ekonomisti Nobelovci 1990-2003

Marović

BOOK OF ABSTRACTS

ARTICLES PUBLISHED IN INTERNATIONAL JOURNALS – SCI/ SCIE/SSCI/A&HCI list

1. ECONOMIC DEVELOPMENT OF MONTENEGRO FROM 1918 TO 1990: THE IMPACT OF POLITICAL STATUS AND ECONOMIC DEVELOPMENT MODEL

Andrijašević, Ž. & **Baćović, M.** (2022). Economic development of Montenegro from 1918 to 1990: the impact of political status and economic development model. *Southeast European and Black Sea Studies*, 22(2), 207-224.

Abstract

This study aims to explore the impact of the different political statuses of Montenegro within Yugoslavia from 1918 to 1990 and the state-led development strategies in the process of intensive postwar industrialization on its economic development. This study investigates the possible causes of the lower level of development of Montenegro in relation to other parts of Yugoslavia. The research shows that, after gaining the status of an equal federal member in Yugoslavia after World War II, in combination with the state-led model of accelerated industrialization, it achieved the best economic results in its history. This emphasizes the positive effects of state-led development in regions with a weak capitalist tradition and underdeveloped political and market institutions. By applying the growth accounting method, we estimated the annual growth rates of TFP in Montenegro and Yugoslavia from 1952 to 1988. The results show lower TFP growth in Montenegro than in Yugoslavia because of the lower development of its determinants (education, infrastructure, market efficiency, innovation, and institutions).

Keywords: Montenegro, Yugoslavia, state-led development strategies, socialism, total factor productivity.

DOI: <https://doi.org/10.1080/14683857.2021.2018157>

2. IS INCOME CONVERGENCE POSSIBLE WITH A DIMINISHING INDUSTRY'S OUTPUT? DEVELOPMENT GAP AND STRUCTURAL CHANGES IN MONTENEGRO SINCE THE WORLD WAR II

Andrijašević, Ž. & **Bačović, M.** (2022). Is Income Convergence Possible with a Diminishing Industry's Output? Development Gap and Structural Changes in Montenegro since the World War II. *European Journal of Sustainable Development*, 11(1), 1-1.

Abstract

Intensive industrialization in the second half of XX century was the main driving force of the most dynamic economic growth in the Montenegrin economic history. Since the transition from self-management socialism to a market-oriented economy, the Montenegrin economy has become more service-oriented. Empirical studies show that TFP growth is higher in industry and knowledge-intensive services than in other services, leading to service-oriented economies growing at a lower rate. This study confirms the same for the Montenegrin economy. If industry and knowledge-intensive services do not expand, will Montenegro diverge instead of converging to developed economies? The results from this study contribute to convergence analysis and serve as an example of the growth prospects of developing countries with fewer industry and knowledge services-oriented economies.

Keywords: Industrialization, Self-management socialism, Total factor productivity, Income convergence, Montenegro.

DOI: <https://doi.org/10.14207/ejsd.2022.v11n1p1>

3. SUSTAINABILITY ASSESSMENT OF NATIONAL PARKS

Asmantaite, V., Dapkus, R., **Karadžić, V.**, Korneeva, E. & Ghauri, S. P. (2021). Sustainability Assessment of National Parks. *Transformations in Business & Economics*, Vol. 20, No. 1, p53-68.

Abstract

The aim of this article is to perform a multicriteria assessment of the sustainability of Lithuanian national parks. The multi-criteria assessment method SAW is suitable for the assessment of the sustainability of national parks. The main advantage of such an approach, such as simplicity and suitability for the sustainability assessment of national parks as a tourist destination

and its comparison with the sustainability assessments of other tourist destinations according to the specified criteria, was substantiated by Schianetz and Kavanagh (2008) as well as Velasquez and Hester (2013). Three main sustainability dimensions were addressed during the assessment: economic, social, and environmental. Aukstaitija National Park is the best rated in Lithuania in terms of overall sustainability. In terms of ecological sustainability, Dzukija National Park was rated the best, in terms of social sustainability – Trakai Historical National Park, which was also rated the best in terms of the economic component of sustainability. After the sensitivity analysis of the sustainability of Lithuanian parks, the sustainability of the Aukstaitija National Park is the highest not only in terms of the overall assessment but also in terms of such assessments when the social and economic components of sustainability are the most important. Only according to the nature protection component, the sustainability of Dzukija National Park is assessed as the best. Thus, after performing the sensitivity analysis, it can be concluded that the most sustainable in Lithuania is the Aukstaitija National Park, especially the aspects of economic and social sustainability.

Keywords: values, commitment, culture, Estonia, Germany, Greece and Romania.

4. TOTAL FACTOR PRODUCTIVITY GROWTH IN UPPER MIDDLE-INCOME BALKAN COUNTRIES FROM 2000-2017, TOTAL ECONOMY AND SECTORAL APPROACH: GROWTH ACCOUNTING METHOD

Baćović, M. (2021). Total factor productivity growth in upper middle-income Balkan countries from 2000-2017, total economy and sectoral approach: growth accounting method. *Argumenta Oeconomica*, 1(46), 79-97.

Abstract

The author estimated TFP in the total economy and at sectoral level (agriculture, industry and services) in seven upper middle-income Balkan countries (Albania, Bulgaria, Bosnia and Herzegovina, North Macedonia, Montenegro, Serbia and Romania) from 2000 to 2017, applying the growth accounting approach. This is the first study presenting estimates on TFP on a sectoral level for a selected group of countries, and also the first study presenting estimates on TFP in the total economy for a selected time period. The sample was selected based on income level and geographic criteria. All countries are ex-centrally planned economies. Although several studies presented growth accounting for Central and Eastern European countries for earlier years, very few presented it for Balkan countries, and none for this time frame and using a sectoral approach. In addition, the time frame was split into two subperiods, 2000-2009 and 2010-

2017, to gain a better insight into TFP growth in the earlier transitional phase in each country, and including changes which may occur as the country is moving towards a higher income level. Although some countries from the sample, such as Bulgaria and Romania, made transitional progress earlier than others, the economies of all countries from the sample experienced negative trends during the global financial crisis (2007-2009), so the study included that period in the first subperiod. Other than this, the contribution to the literature is the presented methodology for sectoral TFP computation. The research confirmed the importance of sectoral TFP analysis and subperiod analysis, as variations between TFP in the total economy and at sectoral level are significant, but also between two sub periods.

Keywords: total factor productivity (TFP), growth accounting method, upper-middle income economies, Balkans, sectoral approach.

DOI: <https://doi.org/10.15611/aoe.2021.1.04>

5. STRUCTURAL CHANGES AND GROWTH IN EUROPE: ARE KNOWLEDGE-INTENSIVE SERVICES CHANGING PARADIGM OF EXPANSION OF SERVICES AS A LONG-TERM GROWTH-DIMINISHING FACTOR?

Baćović, M., Andrijašević, Ž. & **Cerović Smolović, J.** (2022). Structural changes and growth in Europe: are knowledge-intensive services changing paradigm of expansion of services as a long-term growth-diminishing factor?. *Ekonomický časopis*, 70(2), 124-143.

Abstract

We explored the patterns of structural changes in Europe and found growing relevance of the service sector, particularly knowledge-intensive services. The study shows that labour productivity and TFP growth were lower in the service sector than in the goods sector but were higher in knowledge-intensive services than in other services. GDP per capita growth is positively related to the output's share of knowledge-intensive services as well as GDP growth and TFP growth in high-income countries, but not in medium-income economies. This might be explained by the rapid growth in the earlier stages of development in less-developed countries and its subsequent slowdown. Although knowledge-intensive services are the fastest growing sector in all countries, industry is still the most relevant sector for long-term growth, with the highest TFP and labour productivity growth. The growing knowledge-intensive services sector, with its higher TFP growth than other services, partially overcomes the negative effects of expansion of the service sector on long-term output growth. This study shows that R&D invest-

ment growth leads to significantly higher output growth in knowledge-intensive services than in other sectors, which may be used as a relevant policy tool.

Keywords: structural changes, output growth, labour productivity, TFP, knowledge-intensive services.

DOI: <https://doi.org/10.31577/ekoncas.2022.02.02>

6. DIVERGENCE BETWEEN THE ECONOMIES OF THE (FORMER) YUGOSLAV REPUBLICS: IS IT POSSIBLE TO CHANGE DIRECTION?

Bačović, M., Andrijašević, Ž. & **Pejović, B.** (2022). Divergence between the Economies of the (Former) Yugoslav Republics: Is It Possible to Change Direction?. *Eastern European Economics*, 60(3), 265-284.

Abstract

This paper investigates the structural components that determine conditional convergence and the reciprocal relationship between these components and income in the (former) Yugoslav countries. Applying an ARDL model, we found that, in the long run, capital stock growth and R&D expenditures are positively dependent on GDP per capita growth, but R&D negatively depends on employment growth. R&D has an impact on GDP per capita growth in the long run, but not in the short run. Applying the OLS model, we estimated the significance of R&D and tertiary education outcomes on output growth and found it to be significant and positive. We found that convergence is a bidirectional process.

Keywords: Conditional convergence, ARDL, Yugoslavia, socialism, research and development.

DOI: <https://doi.org/10.1080/00128775.2022.2038034>

7. STEM EDUCATION AND GROWTH IN EUROPE

Bačović, M., Andrijašević, Ž. & **Pejović, B.** (2022). STEM Education and Growth in Europe. *Journal of the Knowledge Economy*, 13(3), 2348-2371.

The share of STEM program graduates in relation to the total tertiary graduates declined in Europe for the past two decades, although the expenditures for education and share of tertiary

education graduates in total population increased, respectively. The quality of education, measured with the sample mean PISA scores, was almost equal to its 2000 value, lacking improvements. Simultaneously, GDP per person growth rate declined in Europe, the structural changes occurred, with growing share of the services and diminishing of the goods sectors. The share of the high knowledge manufacturing in relation to GDP declined, which is the subsector with the highest average annual output and productivity growth rates. In services, the share of the knowledge-intensive services, respectively, increased. The descriptive statistics analysis shows strong linear association among the science and technical education, output's structure, income per person and productivity growth. Applying the panel least square (fixed and random effects) model on the sample of thirty-five European countries and period from 1995 to 2019, we found significant contribution by STEM educated workers to output growth. Contribution to output growth by tertiary educated employees and the outcome of the investment in research and development in the high-knowledge manufacturing and knowledge-intensive services were above all sectors' average. This is relevant as output and employment growth in these sectors surpass the same in other sectors, therefore contributing to higher income per persons and GDP growth. As STEM skills and investment in research and development have positive impact on GDP per person growth and productivity, its growth is indispensable to foster economic progress.

Keywords: STEM education, GDP growth, High-knowledge manufacturing, Knowledge-intensive services, Investment in research and development.

DOI: <https://doi.org/10.1007/s13132-021-00817-7>

8. THE BALKAN PARADOX: ARE WAGES AND LABOUR PRODUCTIVITY SIGNIFICANT DETERMINANTS OF FDI INFLOWS?

Bačić, M., Jaćimović, D., Lipovina Božović, M. & Ivanović, M. (2021). The Balkan Paradox: Are Wages and Labour Productivity Significant Determinants of FDI Inflows?. *Journal of Balkan and Near Eastern Studies*, 23(1), 144-162.

Abstract

Although middle-income Balkan countries have attracted substantial FDI inflows, the level of that inflow is still significantly lower than the European average, with no visible redirection towards the Balkans. Both wages and labour productivity have had a significant impact on FDI inflows in European Union (EU) countries. This research aims to explore the significance of

those variables in the countries of the Balkans. We have found that, in Balkan countries, FDI inflows respond negatively to shocks in labour productivity, which is contrary to the experience of EU countries. In EU countries, growth in gross wages has a negative impact on FDI inflows, while in Balkan countries, we found a paradoxical scenario, in that increased wages actually have a positive impact on FDI inflows.

DOI: <https://doi.org/10.1080/19448953.2020.1818039>

9. FORECASTING MACROECONOMIC EFFECTS OF STABLECOIN ADOPTION: A BAYESIAN APPROACH

Bojaj, M., **Muhadinović, M.**, Bracanović, A., Mihailović, A., Radulović, M., Joličić, I. & Milačić, V. (2022). Forecasting macroeconomic effects of stablecoin adoption: A Bayesian approach. *Economic Modelling*, 109, 105792.

Abstract

This study analyzes the effect of stablecoin adoption on key macroeconomic factors in Montenegro. The main explanation for the adoption of stablecoins is their one-to-one peg to various currencies and commodities. Previous studies have relied on the relationships among cryptocurrencies and thus could not disentangle the country-level macroeconomic effects of stablecoins from the effects of other cryptocurrencies. Using data from January 2006 to December 2019, we decompose the correlation between cryptocurrencies and their effects on the economy due to (a) shocks to stablecoins and (b) shocks to Bitcoin. Contrary to assumptions, stablecoins do not maintain their peg in “crash times” but do promote economic growth. Bitcoin’s volatility deanchors investor expectations, disrupts markets, and destabilizes key macroeconomic factors. Our novel findings indicate that stablecoin adoption should not be based only on a one-to-one assumption and reveal the mechanism of key gaps by a prudential authority.

Keywords: Bitcoin; Connectedness; Forecast; Macroeconometrics; Policy objective; Stablecoin adoption.

DOI: <https://doi.org/10.1016/j.econmod.2022.105792>

10. TOP 1% AND INEQUALITY CONNECTEDNESS IN THE EMU AND WB

Bojaj M., **Đurović, G.**, Fabris, N., **Milović, N.** (2022). Top 1% and inequality connectedness in the EMU and WB. *International Review of Economics and Finance*, Vol.83, 139-155.

Abstract

This study analyzes the connectedness of income inequality, governance, and key macroeconomic factors in the EMU and WB. Using data from 2006 to 2019, we measure spillover connectedness on the economies due to shocks to (a) inequality, (b) governance, and (c) key macroeconomic factors. Contrary to assumptions, the top 1% and government effectiveness are big contagion transmitters poised to wreak havoc the WB and the EMU. Our novel findings indicate that the EU has to immediately assist the WB in stabilizing the inequality since the dangerous and growing inequality is a historical violent shock for the WB and the EMU.

Keywords: Inequality, Connectedness, Macroeconometrics, Policy objective, Governance

DOI: <https://doi.org/10.1016/j.iref.2022.08.023>;

11. SUSTAINABILITY OF ONLINE TEACHING: THE CASE STUDY MOTHER TONGUE SPELLING COURSE AT MONTENEGRIN UNIVERSITIES

Burić, M., **Novović Burić, M.**, Jakšić Stojanović, A., **Kaščelan, Lj.** & Žugić, D. (2022). Sustainability of Online Teaching: The Case Study Mother Tongue Spelling Course at Montenegrin Universities. *Sustainability*, 14(21), 13717.

Abstract

This paper aims to examine the sustainability of online teaching using the ZOOM application. The research is exclusively related to the course entitled Mother Tongue Spelling at the university level. Its main goal is to analyze the perceptions of surveyed students of Montenegrin philology faculties about the advantages and disadvantages of this type of teaching and their attitude towards traditional, online or blended models of teaching. This paper will examine the opinion of students regarding the application of dialogic, monologic, textual and blended communication methods. Descriptive statistics and the decision tree model were used in processing the survey data. The research showed that students see the availability of lecture recordings and attending lectures regardless of their current location as the biggest advantag-

es of online spelling classes, while the most significant limitations point to technical problems and lack of social interaction. The results also showed that the students prefer the application of the blended method, while the monological method was rated the lowest. The key contribution of this paper is its focus on online learning of the students' mother tongue, not a foreign language.

Keywords: online teaching and learning; Zoom application; sustainable education; blended approach; mother tongue; literacy acquisition.

DOI: <https://doi.org/10.3390/su142113717>

12. FINANCIAL AND ECONOMIC INVESTMENT EVALUATION OF WASTEWATER TREATMENT PLAN

Četković, J., Knežević, M., **Lakić, S.**, Žarković, M., Vujadinović, R., Živković, A. & Cvijović, J. (2022). Financial and Economic Investment Evaluation of Wastewater Treatment Plant. *Water*, 14(1), 122.

Improved Cost-Benefit Analysis (CBA) analysis requires a broader analytical framework, in order to perceive each project individually from the perspective of potentially measurable and significant effects on the environment and society as a whole. The main goal of our paper is to assess the financial and economic justification for variant V3 (as the most technically optimal) of the wastewater treatment plant (WWTP) construction project in Nov Dojran, North Macedonia, with the purpose of advancing municipal infrastructure and environmental benefits from improved water treatment. Based on the economic analysis conducted, we conclude that the investment in the WWTP project is justified, because the economic internal rate of return is higher than the opportunity cost of capital (EIRR = 16.38%), the economic net present value is higher than 0, and EBCR (benefit-cost ratio) is greater than 1 (EBCR = 2.11). The highest environmental benefit of 49.2% in total environmental benefits is associated with nitrogen, while phosphorus is the next pollutant in the structure of environmental benefits at 46.1%. The environmental benefits of removing biological oxygen demand (BOD) and chemical oxygen demand (COD) are significantly less important, despite the removal of significant amounts of these pollutants during treatment. The situation is similar with suspended particles.

Keywords: economic analysis; wastewater treatment; pollutants; environmental benefits.

DOI: <https://doi.org/10.3390/w14010122>

13. ENVIRONMENTAL BENEFITS OF AIR EMISSION REDUCTION IN THE WASTE TIRE MANAGEMENT PRACTICE

Ćetković, J., Lakić, S., Žarković, M., Vujadinović, R., Knežević, M., Živković, A. & Cvijović, J. (2022). Environmental Benefits of Air Emission Reduction in the Waste Tire Management Practice. *Processes*, 10(4), 787.

Abstract

Montenegro faces serious challenges in terms of waste tire management. The main goal of our paper is to consider the financial and economic justification of the implementation of the first phase of the project of collection, takeover and transport, sorting, and storage of waste tires from the three municipalities in Montenegro. The financial feasibility analysis pointed out the need to organize the second phase of the project and the production of commercially usable and energy efficient products. That phase would lead to the desired commercial effects and will probably ensure the financial sustainability of the project. The economic feasibility analysis of the project included an assessment of the socio-economic benefits from the emission reduction of the first group of pollutants (PM, SO_x, NO_x, VOC, CO) as a consequence of the waste tires' destruction, predominantly by combusting them. Unit values of pollution costs by types of gases, adjusted for Montenegro, were defined in the interval from 192 EUR/t for CO to 24,294 EUR/t for PM. We proved that the direct socio-economic benefits of this project are savings in the cost of environmental pollution. The total present value of discounted costs in the observed time period was calculated at the level of EUR 1,620,080, while the total present value of the positive socio-economic effects was estimated at EUR 1,991,180. Dynamic justification indicators suggest that this investment has a satisfactory socio-economic justification, i.e., the economic rate of return is higher than the opportunity cost of capital (ERR = 15.82%), the economic net present value is greater than 0 (ENPV = 371,100 EUR), and the benefit–cost ratio is greater than 1 (B/C ratio = 1.23)

Keywords: waste tire management; air emission; cost–benefit analysis; socio-economic benefits; savings in the cost of environmental pollution.

DOI: <https://doi.org/10.3390/pr10040787>

14. ECONOMIC ANALYSIS OF MEASURES FOR GHG EMISSION REDUCTION

Ćetković, J., Lakić, S., Živković, A., Žarković, M. & Vujadinović, R. (2021). Economic analysis of measures for GHG emission reduction. *Sustainability*, 13(4), 1712.

Abstract

The European Union, as a signatory to the Paris Agreement, has approached the action against greenhouse gas (GHG) emissions and climate change quite ambitiously, striving to achieve climate neutrality by 2050. Extension of the European Green Deal policy implementation to the Western Balkans can only increase the chances of the climate neutral agenda. Expectations from Montenegro in the coming period are transposable to other Western Balkans countries as they are urged to start implementing the Paris Agreement by establishing appropriate policies and measures. In this regard, this paper presents the analysis of the financial and economic analysis results of measures to reduce GHG emissions in Montenegro. With this respect, least cost analysis—cost effectiveness analysis and cost–benefit analysis were conducted. The analysis results indicated that due to the thermal power plant reconstruction, increased use of renewable energy sources and measures to increase energy efficiency, the largest reduction in GHG emissions in Montenegro in the next 10 years is expected in the energy sector.

Keywords: GHG emission; economic analysis; least cost analysis; cost-benefit analysis.

DOI: <https://doi.org/10.3390/su13041712>

15. APPLICATION OF ECONOMIC ANALYSIS OF AIR POLLUTION REDUCTION MEASURES

Ćetković, J., Lakić, S., Žarković, M., Đurović, G., Vujadinović, R. (2021). Application of Economic Analysis of Air Pollution Reduction Measures. *Polish Journal of Environmental Studies*. 30(1), 585–599.

Abstract

This paper presents the economic analysis of air pollution reduction measures in Montenegro. After a brief analysis of the current situation in Montenegro and completed cost estimation of the implementation of these measures, the Low Cost Analysis has been used to determine their cost effectiveness levels. As Low Cost Analysis cannot provide a complete answer on indi-

vidual eligibility, Cost-Benefit Analysis has been taken into account for calculation of economic performance indicators. Analysis results indicate that the construction of a flue desulphurization system in Thermal Power Plant Pljevlja significantly reduces SO₂ emissions. Increasing alternative fuels use, new generations of vehicles and electro mobility in transport measure is only one of the benefits to reduce gas emissions. Similar situation is with the replacement of heating appliances and energy efficiency measures in individual residential buildings, which primarily contributes to energy efficiency. Construction of long-distance heating system measure shows excellent economic results. Prohibition of harvest residues and agricultural waste ignition measure adds to suspended particles PM_{2.5} emission reduction, cost and benefit ratio is very favorable. It is expected that these measures implementation will certainly contribute to the reduction of pollutant emissions into the air.

Keywords: air pollution, economic analysis, low cost analysis, cost-benefit analysis.

DOI: <https://doi.org/10.15244/pjoes/122230>

16. EFFECTIVENESS OF TAX POLICY CHANGES IN MONTENEGRO: SMOKING BEHAVIOUR BY SOCIO-ECONOMIC STATUS

Čizmović, M., **Mugoša, A.**, Kovačević, M. & **Laković, T.** (2022). Effectiveness of tax policy changes in Montenegro: smoking behaviour by socio-economic status. *Tobacco Control* 2022. 0:1–9.

Abstract

Background: The main goal of this study was to examine the responsiveness of smoking prevalence and cigarette consumption to price and income changes by income groups and the effectiveness of tax policy changes to reduce cigarette consumption in Montenegro.

Data and methods: A two-part model was applied to estimate smoking participation, smoking intensity price and income elasticity. The first part of the model applies logit regression, while the second uses Deaton's model to improve the validity and objectivity of conditional (smoking intensity) elasticity results. A generalised linear model (GLM) was applied to verify robustness. The reason for this is that Deaton's model is commonly used in the analysis of Household Budget Survey (HBS) data, especially when households do not report the market price. Moreover, using this model, it is possible to capture the shading of quality to price change. The analysis used HBS data (2006–2017).

Results: The estimates indicate that tobacco pricing policies had a much higher impact on smoking prevalence in the low-income group (price elasticity of -0.595) relative to the high-income group (price elasticity of -0.344). The same conclusion could be drawn for the smoking intensity elasticity: the high-income group was the least affected by changes in price (price elasticity of -0.258). At the same time, the most affected was the low-income group, with price elasticity of -0.424 . Poorer households spent a larger share of their budget on cigarettes. The simulation results confirm that increases in the specific excise taxes of 58.3% on tobacco would reduce total cigarette consumption by 11.25% while increasing the collection of government revenue by 8.07%.

Conclusion: Smoking prevalence and consumption are very responsive to price and income changes, with considerable differences in elasticities between income groups. The taxation policy has a positive impact on changing patterns of consumption and public revenues across each income group. Low-income and middle-income households would benefit the most, while on the other hand, the highest revenue collection was generated from the wealthiest group. Our results align with results obtained so far for other low-income and middle-income countries. This paper contributes to the analysis of the smoking prevalence and cigarette consumption responsiveness to price and income changes, which was conducted for the first time in Montenegro.

DOI: <http://dx.doi.org/10.1136/tobaccocontrol-2021-056876>

17. THE ROLE OF INFORMATION COMMUNICATION TECHNOLOGIES AS A MODERATOR OF KNOWLEDGE CREATION AND KNOWLEDGE SHARING IN IMPROVING THE QUALITY OF HEALTHCARE SERVICES

Colnar, S., **Radević, I., Martinović, N., Lojpur, A.** & Dimovski, V. (2022). The role of information communication technologies as a moderator of knowledge creation and knowledge sharing in improving the quality of healthcare services. *PloS one*, 17(8), e0272346.

Abstract

This study examines the role of knowledge creation, knowledge sharing and information communication technologies, which are organizational factors that influence the quality of healthcare services. In today's knowledge-intensive environment, understanding and gaining in-depth knowledge on how to improve the quality of healthcare services is gaining in importance and recognition. Quantitative data collected in 2019 with 151 respondents employed in healthcare organizations was used. Running a series of hierarchical linear regression models, we found a significant positive relationship between knowledge creation and quality of health-

care services, and a significant positive relationship between knowledge sharing and quality of healthcare services. Empirical data additionally provides support for information communication technologies that act as a moderator both in the relationship between knowledge creation and knowledge sharing with quality of healthcare services. With our data, we provide empirical backing for the impact of knowledge creation, knowledge sharing and information communication technologies on the quality of healthcare services that are provided by Montenegrin healthcare organizations. Our paper offers theoretical and practical implications derived from our research study.

DOI: <https://doi.org/10.1371/journal.pone.0272346>

18. ANALYZING THE FACTORS INFLUENCING THE FORMATION OF THE PRICE OF ELECTRICITY IN THE DEREGULATED MARKETS OF DEVELOPING COUNTRIES

Dragašević, Z., Milović, N., Đurišić, V. & Backović, T. (2021). Analyzing the factors influencing the formation of the price of electricity in the deregulated markets of developing countries. *Energy Reports*, 7, 937-949.

Abstract

The aim of this paper is to measure the impact of certain factors on the formation of the price of electricity, which is obtained from conventional and renewable energy sources, in the deregulated markets of developing countries, such as Montenegro. Another goal is to identify and analyze the criteria that can lead to a change in the electricity market structure. This study was especially inspired by the fact that no similar research has been conducted in this domain, according to the authors' knowledge. A regression model is applied in the paper, which can be used to display the fluctuation of electricity prices based on the analyzed factors. In addition to price as a dependent variable, the model also examined eight factors that are independent variables. Apart from the basic model, another model has been formulated which, in addition to a price as dependent variable and the examined factors, also takes into consideration the production of electricity from renewable sources. The results of the research showed that an increase in the amount of electricity produced will lead to a slight increase in price, which is to be expected considering there is still one large producer servicing the market, which, despite the deregulation of the market, still has significant monopoly power. The generation of electricity by small hydropower plants will not significantly affect price change, and these entities will behave as if they were in a market of perfect competition. Further opening up the market to new competitors would lead to a fall in the price of electricity. Based on the predicted capacity of electricity generation from small hy-

dropower plants, the electricity deficit could be reduced; in another words it could lead to the reduction of imports. Based on the results of the study, energy policy makers will be able to adopt informed strategies and make decisions related to developments in the energy market, most notably the creation of a common EU energy market. Also, the results of the conducted research expand the theoretical body of work dealing with the determination of the price of electricity. Future studies could address the issue of using natural potential for the generation of electricity from renewable sources, such as solar energy, wind energy and other sources.

Keywords: Developing countries, Deregulated electricity market, Regression model, Renewable energy sources, a dominant firm leadership model.

DOI: <https://doi.org/10.1016/j.egy.2021.07.046>

19. RENEWABLE ENERGY IN THE WESTERN BALKANS: POLICIES, DEVELOPMENTS AND PERSPECTIVES

Đurašković, J., Konatar, M. & Radović, M. (2021). Renewable energy in the Western Balkans: Policies, developments and perspectives. *Energy Reports*, 7, 481-490.

Abstract

The development of the energy sector is one of the most critical issues in the Western Balkans region. Due to the region's high renewable energy sources (RES) potential, renewable energy is considered a promising method for building sustainable and resilient energy systems that offer attested and affordable energy to fuel economic development of a region, while reducing import dependence. The aim of this research is to discuss current trends in renewable energies in Western Balkans countries, and to analyze the policies promoting and barriers to RES development, as well as to provide recommendations for the future growth of renewable energy in this region. Even though these countries have defined targets for RES in their energy policies, there are gaps between the targets and actual results, as national government face various energy challenges. The main barriers common to all countries are regulatory uncertainty and low transparency levels, a slow and unpredictable planning process and limited regional market integration. Thus, it is necessary to undertake a more active approach through targeted renewable energy policies.

Keywords: Renewable energy sources; Renewable energy policy; Western Balkans.

DOI: <https://doi.org/10.1016/j.egy.2021.07.104>

20. TOURISM-LED ECONOMIC GROWTH IN MONTENEGRO AND SLOVENIA

Gričar, S., Bojnec, Š., **Karadžić, V.** & **Backović Vulić, T.** (2021). Tourism-led economic growth in Montenegro and Slovenia. *Economic Research-Ekonomska Istraživanja*, 1-33.

Abstract

This article expounds one of the first attempts to explore the relationship between tourist arrivals and gross domestic product (GDP) in Montenegro and Slovenia. Both countries are newcomers on the tourist destinations map, derived from what was previously Yugoslav republics existing as a singular emerging tourist destination. Data vector for empirical analysis covers quarterly change of GDP at constant prices and monthly data for tourist arrivals during January 2010 – December 2019 as an endogenous variable. The cointegration is used in the modelling structure. The empirical results confirm research hypothesis of uni-causal relationship of economic growth-led domestic tourism growth in Montenegro and one cointegrated vector. No cointegration vector was confirmed for Slovenia. These results are important for research, policymakers and tourism practice. Considering that, tourism and economic growth have a different distribution of causalities during the expansion period with a boost of tourist arrivals and vice versa during the economic downturn.

Key words: Gross domestic product (GDP), Montenegro, Slovenia, time series causalities, tourism-led economic growth, tourist arrivals

DOI: <https://doi.org/10.1080/1331677X.2021.1875858>

21. TOURISM PRICE NORMALITIES IN TWO ADRIATIC EAST COAST'EURO'COUNTRIES

Gričar, S., Bojnec, Š., **Karadžić, V.** & **Backović, T.** (2022). Tourism price normalities in two Adriatic east coast'euro'countries. *Economic Research-Ekonomska Istraživanja*, 35(1), 4865-4883.

Abstract

This debut work offers a stunning look at real vs nominal prices that consider more than just inflation. The inadequate examination of hospitality price comparison is investigated between two non-neighbouring Adriatic east coast countries – Slovenia and Montenegro – using the euro. Hospitality prices are an essential indicator in hospitality markets, destination marketing and management planning. Using 73 monthly time-series data for the economic crisis period from December 2008 to December 2014, this period covers one shock in a series. One of the key man-

agerial features of cointegrated spatial hospitality price spread was that Montenegro followed Slovenian hospitality prices. Hospitality prices in Montenegro and Slovenia tend to be weakly integrated into the long term and seasonally driven in the short term. In addition, the econometric experimentation has given a theoretical novelty for underpinned and undermined tourism economy modelling in normalities. This state-of-the-art econometric feature is included in a customary vector error correction model (VECM). Robust applied results recognise that hospitality prices in Montenegro are domestic driven and in Slovenia Eurozone driven. This finding is relevant for applied economics on obtaining a normally distributed price model. Its theoretical and managerial implications are vital for hospitality economics, marketing and tourism management.

Keywords: Tourism price development; Adriatic east coast countries; normally distributed model.

DOI: <https://doi.org/10.1080/1331677X.2021.2019078>

22. BINARY PROGRAMMING MODEL FOR ROSTERING AMBULANCE CREW – RELEVANCE FOR THE MANAGEMENT AND BUSINESS

Horvat, A. M., Dudić, B., Radovanov, B., **Melović, B.**, Sedlak, O. & Davidekova, M. (2021). Binary Programming Model for Rostering Ambulance Crew – Relevance for the Management and Business. *Mathematics*, 9(1), 64.

Abstract

The nature of health care services is very complex and specific, thus delays and organizational imperfections can cause serious and irreversible consequences, especially when dealing with emergency medical services. Therefore, constant improvements in various aspects of managing and organizing provision of emergency medical services are vital and unavoidable. The main goal of this paper is the development and application of a binary programming model to support decision making process, especially addressing scheduling workforce in organizations with stochastic demand. The necessary staffing levels and human resources allocation in health care organizations are often defined ad hoc, without empirical analysis and synchronization with the demand for emergency medical services. Thus, irrational allocation of resources can result in various negative impacts on the financial result, quality of medical services and satisfaction of both patients and employees. We start from the desired staffing levels determined in advance and try to find the optimal scheduling plan that satisfies all significant professional and regulatory constraints. In this paper a binary programming model has been developed and implemented in order to

minimize costs, presented as the sum of required number of ambulance crews. The results were implemented for staff rostering process in the Ambulance Service Station in Subotica, Serbia. Compared to earlier scheduling done ad hoc at the station, the solution of the formulated model provides a better and equable engagement of crews. The developed model can be easily modified and applied to other organizations with the same, stochastic, nature of the demand.

Keywords: decision making; binary programming; scheduling; ambulance service; health care organizations

DOI: <https://doi.org/10.3390/math9010064>

23. INFLATION FORECASTING IN THE WESTERN BALKANS AND EU: A COMPARISON OF HOLT-WINTERS, ARIMA AND NNAR MODELS

Karadžić, V. & Pejović, B. (2021). Inflation Forecasting in the Western Balkans and EU: A Comparison of Holt-Winters, ARIMA and NNAR Models. *Amfiteatru Econ*, 23(57), 517-532.

Abstract

The purpose of this paper is to compare the accuracy of the three types of models: Autoregressive Integrated Moving Average (ARIMA) models, Holt-Winters models and Neural Network Auto-Regression (NNAR) models in forecasting the Harmonized Index of Consumer Prices (HICP) for the countries of European Union and the Western Balkans (Montenegro, Serbia and Northern Macedonia). The models are compared based on the values of ME, RMSE, MAE, MPE, MAPE, MASE and Theil's U for the out-of-sample forecast. The key finding of this paper is that NNAR models give the most accurate forecast for the Western Balkans countries while ARIMA model gives the most accurate forecast of twelve-month inflation in EU countries. The Holt-Winters (additive and multiplicative) method proved to be the second best method in case of both group of countries. The obtained results correspond to the fact that the European Union has been implementing a policy of strict inflation targeting for a long time, so the ARIMA models give the most accurate forecast of inflation future values. In the countries of the Western Balkans the targeting policy is not implemented in the same way and the NNAR models are better for inflation forecasting.

Keywords: Inflation, Holt-Winters models, Autoregressive Integrated Moving Average models, Neural Network Auto-regression models, forecasting.

DOI: [10.24818/EA/2021/57/517](https://doi.org/10.24818/EA/2021/57/517)

24. WHAT DRIVES HEALTHCARE EXPENDITURE GROWTH? EVIDENCE FROM CENTRAL AND EASTERN EUROPEAN ECONOMIES

Konatar, M., Kaštelan, S., Kaštelan, U., **Đurašković, J.** & **Radović, M.** (2021). What drives healthcare expenditure growth?: evidence from central and eastern European economies. *Ekonomický časopis*, 69(7), 750-765.

Abstract

The aim of this paper is to examine the determinants of healthcare expenditure in Central and Eastern Europe (CEE) countries. The study covers the period between the years 2000 and 2018. In our research, we implement error correction based on an autoregressive distributed lag (ARDL) model, with focus on the Pooled Mean Group (PMG) estimator. Our estimation results revealed that, in combination, health spending, income, medical progress, population ageing and fiscal capacity together form a statistically significant and stable long-term economic relationship. Our analysis indicates that healthcare spending responds to both short-term and long-term income changes. The obtained results support the prevailing view that health should not be considered a luxury good with an income elasticity close to unity. In the long term, medical progress and population ageing also significantly influence health spending, whilst these variables prove to be insignificant over the short term. Ultimately, government capacity is positively related to health spending dynamics.

Keywords: healthcare expenditures, CEE countries, panel ARDL modeling, income elasticity.

DOI: <https://doi.org/10.31577/ekoncas.2021.07.05>

25. ECONOMIC GROWTH DETERMINANTS IN SOUTH-EAST EUROPEAN COUNTRIES: A SYSTEM GENERALIZED METHOD OF MOMENTS APPROACH

Lakić, S., **Ćetković, J.**, **Pejović, B.**, Žarković, M. & Knežević, M. (2022). Economic Growth Determinants in South-East European Countries: A System Generalized Method of Moments Approach. *East European Politics and Societies*, 36(3), 935-956.

Abstract

Economic growth is a key point of macroeconomic policy and is the subject of constant attention and debate by professional public and policy makers. Theoretical and empirical research

indicates differences in the level and direction of determinants' influence on the growth rate. The main goal of our article is to construct a model of economic growth determinants in South-East European countries. We used an unbalanced panel of 12 selected SEE countries over the period 2006–2019. Our empirical findings have shown that the most robust results can be obtained using a two-step generalized method of moments (GMM) model with dummy variable. In our dynamic model, we found that trade openness and gross fixed capital formation have a positive impact on economic growth, while government expenditures negatively determine economic growth. Gross fixed capital formation has the greatest positive impact on economic growth, while government expenditure has the greatest negative impact.

DOI: <https://doi.org/10.1177/08883254211026369>

26. THE KEY TO WORK–LIFE BALANCE IS (ENRICHED) JOB DESIGN? THREE-WAY INTERACTION EFFECTS WITH FORMALIZATION AND ADAPTIVE PERSONALITY CHARACTERISTICS

Lamovšek, A., Černe, M., **Radević, I.** & Božič, K. (2022). The Key to Work–Life Balance is (Enriched) Job Design? Three-Way Interaction Effects with Formalization and Adaptive Personality Characteristics. *Applied research in quality of life*, 1-30.

Abstract

The COVID-19 outbreak has blurred the boundaries between work and personal life, making the concept of work–life balance (WLB) even more important. Based on a three-source (employees, family members, and supervisors) sample (n=436) of working professionals, we investigated the importance of enriched job design for employee WLB. In addition, on the basis of the job demand-control (JD-C) model, we examined whether organizationally imposed formalization and employees' individual adaptive personality traits (proactive personality and resilience) act as boundary conditions that strengthen this positive relationship. First, we conducted a supplementary analysis to investigate further which of the enriched job design characteristics play the most important role in our three-way interaction models predicting WLB. Then we discuss implications for theory and practice.

Keywords: Work–life balance (WLB), Enriched job design (enriched JD), Formalization, COVID-19, Personality traits.

DOI: <https://doi.org/10.1007/s11482-022-10100-9>

27. IS DIGITAL ECONOMY A GOOD SAMARITAN TO DEVELOPING COUNTRIES?

Lazović, V., Jovović, M., Backović, T., Đuričković, T. & Rondović, B. (2022). Is Digital Economy a Good Samaritan to Developing Countries?. *Sustainability*, 14(14), 8471.

Abstract

It is no surprise that the digital economy (DE) has raised expectations and it is still raising them. The aim of this study is to implement testing which will indicate how much the digital economy can help the less developed countries to overcome the economic lag. In order to come up with an answer, the study is based on provocative hypotheses which will elaborate on the development paradox by which the digital economy cannot help the less developed countries. The argument that supports the main hypothesis of this study declares that GDP growth is not equivalent to the growth of investment in DE infrastructure and, therefore, DE is contributing to the increase in inequality instead of reducing it. The paradox is confirmed with the implementation of the SEM modelling on high-income countries (HIC) and middle-income countries (MIC). Moreover, the study measured, i.e., determined, the relative importance and impact of each DE component on the economic growth in HIC and MIC countries. According to the results of this research, in MIC the most significant DE factor which has an impact on GDP growth is the investment in education, whereas in HIC countries infrastructure has the leading part when it comes to economic growth. The final part of this study includes a proposition of a set of guidelines relating to the direction of public policy development in order to make the most of DE's impact on the creation of a fairer and better system and society. Due to the comprehensive range of questions that come from this study, several topics for future research have been recommended.

Keywords: digital economy, developing countries, economic growth, inequality, public policies.

DOI: <https://doi.org/10.3390/su14148471>

28. IS ECONOMIC THEORY, PRESENTED IN BASIC ACADEMIC TEXTBOOKS, APPLICABLE TO THE DIGITAL ECONOMY?

Lazović, V., Rondović, B., Lazović, D. & Đuričković, T. (2021). Is Economic Theory, Presented in Basic Academic Textbooks, Applicable to the Digital Economy?. *Sustainability*, 13(22), 12705.

Abstract

With the aim of improving modern methods for educating economists, the authors in this paper impose the following topics: What do we want to teach students, and do we teach them the right things? How transformative are our fundamental textbook bases to offer the new knowledge that the digital economy imposes? Bearing in mind previous questions, the aim of this paper is to highlight the gap that exists between economic theory and economic practice in terms of insufficient theoretical scope of the digital economy (DE) and its study, and DE's increasing participation in global practice as an economy based on innovation and new technologies. In the analysis, the authors concentrate on two levels: (1) they analyse the specifics of DE and in that context, they evaluate the applicability of traditional economic theory; (2) they review the representation of DE in university textbooks. Based on the results, the authors conclude that DE possesses specific attributes, and it is necessary to include these as mandatory lessons in university textbooks on the level of basic studies. They suggest some areas for which economic theory should be better explained and supplemented in future research (proposing appropriate guidelines for future efforts in theoretical work). Moreover, through a systematic literature review, the authors approach 90 basic university textbooks in economics and by analyzing their content, they prove that DE is not sufficiently represented in them. The results of the paper suggest that economics textbooks, and thus the curricula of basic studies, should be supplemented with chapters on the digital economy, which will affect the modernization and adequacy of theory with practice.

Keywords: digital economy; economic theory; economics textbooks; principles of economics.

DOI: <https://doi.org/10.3390/su132212705>

29. EVALUATING RELATIONS BETWEEN ORIGINALITY, EFFICIENCY, CONFORMISM AND ENTREPRENEURIAL POTENTIAL OF STUDENTS IN A FAST CHANGING BUSINESS ENVIRONMENT

Marić, M., Subotić, M., Dudić, B., **Melović, B.**, Branković, N. & Milisavljević, S. (2021). Evaluating Relations between Originality, Efficiency, Conformism and Entrepreneurial Potential of Students in a Fast Changing Business Environment. *Sustainability*, 13(4), 1593.

Abstract

The purpose of this paper is to evaluate the relations of originality, efficiency, conformism, and entrepreneurial potential. The sample consisted of a student population from Serbia and Bos-

nia and Herzegovina as EU candidate countries and from the EU member country, Belgium. Research results can help policy makers receive valuable information on how to improve student attitude towards entrepreneurship. Data was collected from a sample of 1008 university students from these three countries. The Kirton Adaptation Innovation Inventory (KAI), Questionnaire on Entrepreneurial Traits (QET), and The Scale of Entrepreneurial Potential (SEP) were applied in the research in order to obtain data. Canonical correlation analysis revealed a significantly strong relation between originality, efficiency, conformism, and dimensions of the Entrepreneurial Traits model, as well as significant relation to the entrepreneurial potential model. Findings from this study may provide data that could be used to develop and foster the entrepreneurship potential of students and help improve the economy in the region.

Keywords: KAI model; entrepreneurship; entrepreneurial potential; students; originality; efficiency; conformism; student's attitude; kirton adaptation-innovation inventory; questionnaire on entrepreneurial traits; the scale of entrepreneurial potential.

DOI: <https://doi.org/10.3390/su13041593>

30. STRATEGIC BUSINESS DECISION MAKING: THE USE AND RELEVANCE OF MARKETING METRICS AND KNOWLEDGE MANAGEMENT

Melović, B., Dabić, M., **Vukčević, M.**, **Ćirović, D.** & **Backović, T.** (2021). Strategic business decision making: the use and relevance of marketing metrics and knowledge management. *Journal of Knowledge Management*, Vol. 25 No. 11, pp. 175-202.

Abstract

Purpose: The purpose of this paper is to investigate the perception of marketing managers in a transition country Montenegro with regards to marketing metrics. The paper examines the degree in which managers are familiar with the way marketing metrics are applied and how important they are in the process of making business decisions in a company operating in a Montenegro.

Design/methodology/approach: Data was collected during 2020 through a survey of 171 randomly selected companies and was analyzed using structural equation model and the statistical method of analysis of variance tests.

Findings: The obtained results show that managers are quite familiar with financial and non-financial metrics. Both groups are applied to a significant degree, as managers believe

that these indicators provide valuable information needed during the decision-making process. Still, more emphasis is placed on the knowledge, implementation and importance of non-financial metrics compared to financial metrics. This is probably due to the specificities of the economic activities of the companies operating in Montenegro, as most of them are service companies, which is why non-financial metrics (such as consumer metrics) are the most important indicators when it comes to ascertaining the market position of the company. Additionally, in recent years the primary focus in Montenegro, as country that is still in the process of transformation from planned economy to a free-market form, has been placed on strengthening of competitiveness and advancing the market orientation of companies. This led to an increase in the importance that managers in transition countries attach to non-financial metrics.

Research limitations/implications: The fact that the survey only covers companies from one country is its limitation.

Practical implications: The obtained results will have a significant empirical contribution, which is reflected in providing guidelines for managers on how to improve the system of measuring and controlling marketing performance, all that to strengthen the competitiveness of the company, and can serve managers of hierarchy levels in a company as guidelines for making decisions on the implementation of marketing strategy and marketing metrics, to improve business performance, multi-context customer interaction, cost-saving and strengthen competitiveness.

Social implications: Obtaining necessary knowledge management and implementing marketing metrics are important conditions for consideration when it comes to the continuous monitoring and improvement of business results, increasing competitiveness and advancing the market position of the company.

Originality/value: The originality stems from the analysis of the interconnection that exists between marketing metrics and strategic decision-making, which is expected to be positively reflected in the development of society, i.e. strengthening the competitiveness of companies based on knowledge management achieved through the assessment of the degree of knowledge, the implementation and the significance of each of the metrics covered within this research in business decision-making processes. The paper provides insights into the extent to which managers understand the meaning of these indicators and are able to combine different marketing metrics to obtain more complex indicators, serving as necessary inputs when making strategic business decisions.

Keywords: Performance measurement, Transition economy, Knowledge management, Decision, Marketing metrics.

DOI: <https://doi.org/10.1108/JKM-10-2020-0764>

31.DETERMINANTS OF MILLENNIALS' BEHAVIOR IN ONLINE SHOPPING – IMPLICATIONS ON CONSUMERS' SATISFACTION AND E-BUSINESS DEVELOPMENT

Melović, B., Šehović, D., Karadžić, V., Dabić, M. & **Ćirović, D.** (2021). Determinants of Millennials' behavior in online shopping–Implications on consumers' satisfaction and e-business development. *Technology in society*, 65, 101561.

Abstract

This paper identifies the attitudes and key determinants of Millennials' online shopping behavior in Montenegro. An empirical survey was conducted in Montenegro on the sample of 813 millennial consumers by using Structural Equation Modeling and the analysis of the variance (ANOVA) test. The results revealed that Millennials are satisfied with previous experience in online shopping. They perceive it beneficial compared to purchase in traditional shops, but also perceive it as very risky, which is why they buy online mostly inexpensive products. The results also suggested that behavior of millennial consumers in the online purchase significantly depends on their demographic characteristics. While the frequency of online shopping is the same for both genders, male consumers spend more money on it compared to women. Also, men to a greater extent prefer doing the online shopping using more famous websites, than women do. The amount spent in online shopping does not depend on age of consumers, but younger Millennials do this type of purchase more often compared to older Millennials. Based on the results, this paper provides implications for managers important for building the trust of consumers and increase of online sales.

Keywords: Millennials, Online shopping, Consumers' behavior, e-business, Montenegro.

DOI: <https://doi.org/10.1016/j.techsoc.2021.101561>

32. ENTREPRENEURIAL DECISION-MAKING PERSPECTIVES IN TRANSITION ECONOMIES – TENDENCIES TOWARDS RISKY/RATIONAL DECISION-MAKING

Melović, B., Veljković, S. M., **Ćirović, D.**, Vulić, T. B. & Dabić, M. (2022). Entrepreneurial decision-making perspectives in transition economies – tendencies towards risky/rational decision-making. *International Entrepreneurship and Management Journal*, 1-35.

Abstract

This paper assesses the ways in which the characteristics of entrepreneurs from transition economies, and the extent to which they participate in making business decisions, affect their propensity to make rational/risky decisions in a work environment. A multicontextual analysis of entrepreneurial decision-making is provided, facilitating a better understanding and the further advancement of entrepreneurship in the transition countries of Montenegro and Serbia. Logistic regression and a Structural Equation Model (SEM) were used to assess data collected from a stratified random sample of 260 entrepreneurs. The results reveal that the demographic characteristics of entrepreneurs have a significant impact on their propensity to make rational/risky decisions. Elderly entrepreneurs with more years of service are more prone to make rational decisions in comparison to younger entrepreneurs, who lack business experience and thus rely on intuition, leading to risky decision-making. Additionally, the results show that the more involved entrepreneurs are in the decision-making process, the more risky decisions will be made; while more employee inclusion leads to business decisions based on rational thinking. The results also reveal that entrepreneurs in transition economies have formed attitudes towards the nature of entrepreneurial activity. Finally, these results reveal that entrepreneurs who consider levels of economic development, national culture, and intuition to be important when making business decisions are more prone to implement risky decisions. Considering the obtained results, this paper provides guidelines for the future research of this issue in transition countries and other developing economies.

Keywords: Entrepreneurship, Transition economy, Decision-making, Risk, Risky decision, Rational decision.

DOI: <https://doi.org/10.1007/s11365-021-00766-2>

33. THE MIDAS TOUCH OF BRANDING: BANKS' BRAND VALUE, INTELLECTUAL CAPITAL AND THE OPTIMIZATION OF THE INTERBRAND METHODOLOGY

Melović, B., Vukčević, M. & Dabić, M. (2021). The Midas touch of branding: banks' brand value, intellectual capital and the optimization of the Interbrand methodology. *Journal of Intellectual Capital*. Vol. 22 No. 7, pp. 92-120.

Abstract

Purpose: The aim of this paper is to show how a bank's brand value is quantitatively assessed using the Interbrand methodology, taking into account the specifics of the banking market. Therefore, the objective of this paper is to review the ways in which brands contribute to the higher market value of banks by strengthening intellectual capital (IC), as reflected in increased levels of competitiveness and the reputation that the bank maintains in the minds of customers.

Design/methodology/approach: This paper applies the Interbrand methodology, which indicates that the assessment of brand value implies the determination of economic profit as the difference between the net operating profit after tax and the cost of capital. The brand profit is then calculated as the product of the economic profit and the index of the brand role. Brand value is obtained as the product of the brand's profit and the discount rate of the brand. In order to further test the results obtained through the application of the Interbrand methodology, linear regression was applied to the panel data in order to provide more efficient econometric estimates of the model parameters.

Findings: This research has shown that the Interbrand methodology's empirical foundations lie in the Montenegrin banking market, but also that, out of all of the analyzed parameters, the greatest significance is obtained from the profit of the brand, which influences the value of bank brands.

Research limitations/implications: This research is related to the service sector—in this case, financial services – meaning that it is necessary to adjust the calculation of the weighted average cost of capital. Although the banking sector is a very competitive market, a limitation exists in the fact that the research was conducted only in Montenegro. In other words, in order to achieve a more detailed analysis, this methodology should be applied to more countries, such as those within the Western Balkans, as they have a relatively similar level of development.

Practical implications: A main contribution of this paper is that the assessment of the banks' brand value could be useful to future investors. Therefore, the improvement of the financial sector—in this case, banks—as institutions that hold a dominant position in the financial market

in Montenegro, is a particularly important issue. It is important to point out that the research conducted could serve as a means by which to bridge the gap between theory and practice, since the methodology of the consulting company Interbrand has been optimized and adjusted to the Montenegrin banking market.

Social implications: On considering the fact that most countries of the Western Balkans are at a similar level of development, the authors can conclude that, with the help of this adapted form of methodology, this research can be applied to assess banks' brand value in neighboring countries.

Originality/value: This paper serves as the basis for further research as the analysis of banking institutions that comprise both marketing and financial aspects, i.e. the application of the Interbrand methodology, was not conducted in Montenegro. Also, this paper overcomes the literal gap between theory and practice as there is little research thus far involving the application of the Interbrand methodology to the field of finance; especially in the field of banking. The authors point out the specifics of the banking sector as a key explanation for this. This is why it is necessary to make certain adjustments to the methodology. The research has positive implications for banks' internal and external stakeholders. The originality of this research is reflected in the fact that the Interbrand methodology has been optimized in order to assess the brand of banks, taking into account the specificity of the analyzed market. Brand is analyzed as a component of IC: another factor that exemplifies the value of this research.

Keywords: Bank, Evaluation, Intangible assets, Brand, Intellectual capital.

DOI: <https://doi.org/10.1108/JIC-08-2020-0272>

34.COVID-19 AND BEYOND: EMPLOYEE PERCEPTIONS OF THE EFFICIENCY OF TELEWORKING AND ITS CYBERSECURITY IMPLICATIONS

Mihailović, A., **Cerović Smolović, J.**, **Radević, I.**, Rašović, N. & **Martinović, N.** (2021). COVID-19 and Beyond: Employee Perceptions of the Efficiency of Teleworking and Its Cybersecurity Implications. *Sustainability*, 13(12), 6750.

Abstract

The main idea of this research is to examine how teleworking has affected employee perceptions of organizational efficiency and cybersecurity before and during the COVID-19 pandemic. The research is based on an analytical and empirical approach. The starting point of the

research is a critical and comprehensive analysis of the relevant literature regarding the efficiency of organizations due to teleworking, digital information security, and cyber risk management. The quantitative approach is based on designing a structural equation model (SEM) on a sample of 1101 respondents from the category of employees in Montenegro. Within the model, we examine simultaneously the impact of their perceptions on the risks of teleworking, changes in cyber-attacks during teleworking, organizations' capacity to respond to cyber-attacks, key challenges in achieving an adequate response to cyber-attacks, as well as perceptions of key challenges related to cybersecurity. The empirical aspects of our study involve constructing latent variables that correspond to different elements of employee perception; namely, their perception of organizational efficiency and the extent to which the digital information security of their organizations has been threatened during teleworking during the pandemic.

Keywords: teleworking; cybersecurity; COVID-19; efficiency; digital information security.

DOI: <https://doi.org/10.3390/su13126750>

35. THE ECONOMIC VIABILITY OF PV POWER PLANT BASED ON A NEURAL NETWORK MODEL OF ELECTRICITY PRICES FORECAST: A CASE OF A DEVELOPING MARKET

Mišnić, N., Pejović, B., Jovović, J., Rogić, S. & Đurišić, V. (2022). The Economic Viability of PV Power Plant Based on a Neural Network Model of Electricity Prices Forecast: A Case of a Developing Market. *Energies*, 15(17), 6219.

Abstract

In this paper, a study was completed investigating the financial viability of a 5 MW solar power plant in Montenegro with direct access to the market, rather than a long-term power purchase agreement. The empirical research included an econometric analysis and forecast of the prices on the exchange market, using two methods, autoregressive integrated moving average (ARIMA) and neural network auto regression (NNAR), which are compared to the forecast electricity prices. The former was used in order to obtain the electricity prices forecast, since it showed significantly better predictive performances. Consequently, the financial analysis results indicated this business strategy is a financially more viable option, even though it implies increased risks. All investigated metrics and sensitivity analysis pointed in favor of this option, which has significantly higher profitability with a shorter payback period, compared to the usual market strategy. The main conclusion and recommendation drawn from the analysis are that taking into account the entire environment and prospects for the following years, a riskier business

strategy of entering the market directly, or a so-called structured PPA, is put forward to improve project returns and speed up energy-transformation processes in a developing country.

Keywords: PV plant, NNAR, electricity prices, financial analysis.

DOI: <https://doi.org/10.3390/en15176219>

36. RELATIONSHIP BETWEEN INSURANCE MARKET AND ECONOMIC GROWTH IN THE EUROPEAN UNION

Mitrašević, M., Pjanić, M. & **Burić Novović, M.** (2022). Relationship Between Insurance Market and Economic Growth in the European Union. *Politička ekonomie*, 2022(4), 395-420.

Abstract

This paper examines the relationship between insurance market development and economic growth in EU member states in the period 1998–2018. Our results indicate that there is no causality between premium per capita and GDP per capita growth in the case of 11 out of the 23 analysed countries, including four countries classified as emerging markets. However, in the case of panel data covering all the countries, we determined a two-way causality between insurance market development and economic growth. In the short run, premium per capita has a positive and significant impact on the economic growth as proven in the data panel and in the case of individual countries, except in the case of Ireland and Luxembourg, where the applied model shows only error-correction coefficient values. Besides, our results indicate that premium per capita has a significant positive effect on economic growth in the long run in the case of Belgium, Cyprus, Bulgaria, Romania and Slovenia, i.e., insurance premium is a key determinant of long-term economic growth. The results show a statistically significant long-term positive relationship between premium per capita and GDP growth per capita in the case of a panel analysis of all the observed countries and countries classified as emerging markets. On the other hand, the panel data analysis of the countries classified in the category of developed markets showed a long-term positive relationship, but not a statistically significant one. Since that results indicate that the insurance market development could contribute to ensuring long-term economic stability and growth of observed countries, special attention needs to be paid to the strategy of insurance market development in a changing business environment.

Keywords: Insurance density, GDP per capita, emerging market, ARDL approach, causality.

DOI: <https://doi.org/10.18267/j.polek.1358>

37. DEVIATION FROM TARGET CAPITAL STRUCTURE AS A FACTOR OF ACQUISITION DECISIONS IN EUROPEAN DEVELOPED MARKETS

Mugoša, A. & Popović, S. (2021). Deviation from target capital structure as a factor of acquisition decisions in European developed markets. *ARGUMENTA OECONOMICA*, 46(1), 53-78.

Abstract

The purpose of this paper is to examine the causal relation between deviations from target capital structure (leverage deficit) and acquisition choices in capital markets in Western Europe. The analysis is conducted using a sample of 921 large companies, which represents a strong and solid base for testing target capital structure and takeover interdependence, as the focus is on the period when half of the largest M&A deals in Western Europe occurred. This study found that leverage deficit is a crucial determinant of acquisition choices and market reaction on acquisition announcements, measured by CARs to bidders. Companies that are underleveraged relative to their target capital structure have a higher probability of undertaking acquisitions. On the other hand, the market reacts unfavourably to acquisition announcements of underleveraged acquirers – overleveraged companies undertake the most value-enhancing acquisitions, whilst underleveraged companies make poor acquisition choices. This paper enriches the literature by empirically extending the understanding of how managers make investment decisions in relation to capital structure, and how capital markets assess the impact of these investments.

Keywords: capital structure, acquisitions, leverage deficit, Western Europe, capital market, cumulative abnormal returns.

DOI: <http://dx.doi.org/10.15611/aoe.2021.1.03>

38. FORECASTING GREENHOUSE GAS EMISSIONS AND SUSTAINABLE GROWTH IN MONTENEGRO: A SVAR APPROACH

Muhadinović, M., Đurović, G. & Bojaj, M. (2021). Forecasting Greenhouse Gas Emissions and Sustainable Growth in Montenegro: a SVAR Approach. *Polish Journal of Environmental Studies*, 30(5), 4115-4129.

Abstract

This paper uses a recursive structural vector autoregression method to investigate and forecast the linkage and causality between greenhouse gas emissions (GHG) and Gross Domestic Product (GDP) in Montenegro empirically from 2006:1 to 2015:12, and out-of-sample 24-month horizon forecasting from 2016:1 to 2017:12. It is the first time that GDP and GHG are modeled and predicted for the economy of Montenegro using the SVAR approach. We examine an individual SVAR model to forecast GDP. The model uses GDP growth and GHG emissions expressed in CO₂ eq by sectors as endogenous determinants. The GHG sectors are energy, industrial process, agriculture and land, and waste. Alternative forecasting scenarios, impulse response functions and variance decomposition of forecast errors are interpreted in combination with expectations. We reveal that the sectors of agriculture and land and energy contribution explain 83.41% of the movement of GDP at the 24-month horizon. The paper provides macroprudential policymakers with an in-depth understanding of the GHG emissions expressed in CO₂ eq by sectors play in sustainable growth in Montenegro.

Keywords: Macroeconometric Forecasting, GDP, GHG emissions, SVAR.

DOI: <https://doi.org/10.15244/pjoes/132625>

39. RESEARCH OF ATTITUDES TOWARD IMPLEMENTATION OF GREEN ACCOUNTING IN TOURISM INDUSTRY IN MONTENEGRO-PRACTICES, AND CHALLENGES

Novović Burić, M., Jakšić Stojanović, A., **Lalević Filipović, A.** & **Kaščelan, Lj.** (2022). Research of Attitudes toward Implementation of Green Accounting in Tourism Industry in Montenegro-Practices, and Challenges. *Sustainability*, 14(3), 1725.

Abstract

The transition to green economies is considered to be a key driver of sustainable economic development. Growing awareness of environmental costs and their integration into corporate performance reporting has led to the development of a new environmental dimension of accounting. Although it is a modern concept, its integration into the tourist business community is important, especially because tourism is recognized as energy and emission intensive. As preserving the environment can create an optimal framework that is in the function of the development of sustainable tourism in Montenegro, this paper discusses and analyzes the degree of knowledge of tourism companies on the application of the green concept, especially through

the prism of socially responsible business. The research study was conducted by applying the classification Decision tree model (DT) on the data obtained by surveying employees and owners of Montenegrin tourism companies. The DT method has shown that socio-demographic factors have a significant impact on understanding the importance of green accounting in the tourism sector of Montenegro and that most tourism companies include corporate social responsibility in their business strategy and policy. The fact that the same or similar research on this topic has not been done in Montenegro, but also in neighboring countries, indicates an important contribution that this paper may have for the scientific and professional community, primarily in the form of incentives to create and publish reports on environmental protection.

Keywords: corporate social responsibility; green accounting; tourism; decision tree; Montenegro.

DOI: <https://doi.org/10.3390/su14031725>

40. DETERMINANTS OF PREMIUM RESERVE IN WESTERN BALKAN COUNTRIES DURING AND AFTER THE CRISIS

Novović Burić, M., Kaščelan, Lj. & Kaščelan, V. (2021). Economic and demographic determinants of premium reserve in Western Balkan countries during and after the crisis. *International Journal of Finance & Economics*, 1-21.

Abstract

This article aims at investigating the impact of economic and demographic factors on premium reserve and thus the possibility for life insurers to invest in the financial market of Western Balkan countries. Using the data panel including economic and demographic trends in the countries of this region in the period from year 2006 to 2016, it is determined that price stability and higher deposit rates may cause faster development of insurance market. Contrary to previous findings, which indicate wages and population ageing as key driving factors in developed countries, in this region these are the youth dependency and care for their schooling. This indicates that a higher significance is given to the component of insurance of death risk than the savings one. However, during crisis period, more than post-crisis period, higher demand for this type of savings was determined due to the decline in confidence in banking sector.

Keywords: financial crisis, financial market, life insurance, premium reserve, Western Balkans.

DOI: <https://doi.org/10.1002/ijfe.2466>

41. ECONOMIC GROWTH, ENERGY CONSUMPTION AND CO₂ EMISSIONS IN THE COUNTRIES OF THE EUROPEAN UNION AND THE WESTERN BALKANS

Pejović, B., Karadžić, V., Dragašević, Z. & Backović, T. (2021). Economic growth, energy consumption and CO₂ emissions in the countries of the European Union and the Western Balkans. *Energy Reports*, 7, 2775-2783.

Abstract

Exploring the relationship between economic growth, energy consumption and CO₂ emissions is an increasingly important research issue. The paper examines the association between gross domestic product per capita, CO₂ emissions and energy consumption from renewable sources for the 27 countries of the European Union and the Western Balkans for the period 2008–2018. The panel vector autoregressive approach (PVAR) was used in the analysis, and the panel VAR model with three variables was evaluated based on the generalized method of moments (GMM). The main findings of the paper are that there is a relationship between the investigated variables: (1) two-way relationship between gross domestic product and CO₂ emissions, (2) two-way negative relationships between CO₂ emissions and energy consumption from renewable sources, (3) no causality has been established between gross domestic product and energy consumption from renewable sources (4) the sign of the relationship in the direction from gross domestic product to CO₂ emissions is negative, while in the opposite direction is positive. The results indicate that most of the variations in CO₂ emissions are determined by variations in GDP, so reducing CO₂ emissions in the long run can be achieved by continuously increasing GDP. Increasing consumption from renewable sources will lead to a direct drop in CO₂ emissions which will have desirable environmental effects. Findings obtained in this research can be important for decision makers in managing energy policy, environmental policy and economic growth and development.

Keywords: CO₂ emission, GDP, Renewable energy, Panel VAR, European Union and Western Balkan.

DOI: <https://doi.org/10.1016/j.egy.2021.05.011>

42. DISENTANGLING EXTERNAL FLOWS (EXTERNAL SHOCKS) AND POLICY EFFECTS ON THE CREDIT ACTIVITIES OF BANKS IN THREE EMERGING COUNTRIES DURING THE GREAT RECESSION

Prašnikar, J., Bole, V., Dominko, M., **Lakićević, M.** & Oblak, A. (2021). Disentangling external flows (external shocks) and policy effects on the credit activities of banks in three emerging countries during the Great Recession. *Journal of Balkan and Near Eastern Studies*, 23(1), 78-100.

Abstract

We analyse the effects of bank wholesale and retail funding swings triggered by the real economy and foreign financial flow shocks, as well as the effects of the corresponding policy interventions in three emerging countries (Croatia, Montenegro, and Slovenia) throughout the boom (2007–2008), bust (2009–2010), and recovery (2011–2013) periods of the Great Recession. We find evidence that supply-side factors were crucial for the huge procyclical credit swing, and that the cyclicity of credits to firms was amplified the most. The paper also documents that policy contribution was of a second-rate order compared to funding effects. The effectiveness of macro prudential and other policies (standard macro, structural) in supporting the stability of financial systems is discussed, and external flow, policy, and regulation effects on the credit activities of banks are disentangled.

DOI: <https://doi.org/10.1080/19448953.2020.1818026>

43. CORRUPTION, PUBLIC TRUST AND MEDICAL AUTONOMY IN THE PUBLIC HEALTH SECTOR OF MONTENEGRO: TAKING STOCK OF THE COVID-19 INFLUENCE

Radević, I., Alfirević, N. & **Lojpur, A.** (2022). Corruption, public trust and medical autonomy in the public health sector of Montenegro: Taking stock of the COVID-19 influence. *PloS one*, 17(9), e0274318.

Abstract

In this paper, we analyze the influence of corruption perception, experiences of corruptive behavior, and healthcare autonomy on the public trust in Montenegrin healthcare, by surveying the general population before and after the global COVID-19 pandemic. By providing a quasi-replication of a previous empirical study of corruption and trust in the Croatian public healthcare sector, we introduce the COVID-19 pandemic as a new research context. Before the

pandemic, we found a consistent and significant negative influence of the corruptive practices and the generally perceived level of corruption (corruption salience) on the trust in public healthcare. The emergence of COVID-19 had mixed effects: while there is a slightly higher effect of corruption salience to the preference of public healthcare, corruptive experiences still matter but are tolerated much higher than before the pandemic. Public assessment of the autonomy of the health system increases preference for public healthcare, both before and after the pandemic, although the emergence of COVID-19 somewhat lowers this effect. The obtained results point to the most significant challenges of the 'post-COVID-19' social context to public health policymaking and management of public healthcare institutions. These include focusing the public healthcare reforms on corruption, reducing waiting times for different diagnostics and medical procedures in the public healthcare system, and regulating the 'dual practice' (simultaneous work in public and private healthcare institutions).

DOI: <https://doi.org/10.1371/journal.pone.0274318>

44. QUALITY OF HEALTHCARE SERVICES IN FOCUS: ROLE OF KNOWLEDGE TRANSFER, HIERARCHICAL ORGANIZATIONAL STRUCTURE AND TRUST

Radević, I., Dimovski, V., **Lojpur, A.** & Colnar, S. (2021). Quality of healthcare services in focus: the role of knowledge transfer, hierarchical organizational structure and trust. *Knowledge Management Research & Practice*, 1-12.

Abstract

This paper explores the role of knowledge transfer, hierarchical organisational structure, and trust as important organisational factors that influence knowledge management practices on the quality of healthcare services. Survey data from 151 healthcare employees collected in Montenegro in 2019 was used. Applying hierarchical linear regression, we found a significant and positive relationship between knowledge transfer and quality of healthcare services, and a significant and negative relationship between hierarchical organisational structure and quality of healthcare services. Trust acts as a moderator in the relationship between knowledge transfer and quality of healthcare services and between hierarchical organisational structure and quality of healthcare services. We provide empirical support for the influence of knowledge transfer, hierarchical organisational structure, and trust on the quality of healthcare services provided by Montenegrin healthcare employees. Our results offer theoretical and practical implications derived from this research study.

Keywords: Quality of healthcare services, knowledge management, public health, knowledge transfer, hierarchical organisational structure, trust.

DOI: <https://doi.org/10.1080/14778238.2021.1932623>

45.CLASS BALANCING IN CUSTOMER SEGMENTS CLASSIFICATION USING SUPPORT VECTOR MACHINE RULE EXTRACTION AND ENSEMBLE LEARNING

Rogić, S. & Kaščelan, Lj. (2021). Class Balancing in Customer Segments Classification Using Support Vector Machine Rule Extraction and Ensemble Learning. *Computer Science and Information Systems*, 18(3), 893-925.

Abstract

An objective and data-based market segmentation is a precondition for efficient targeting in direct marketing campaigns. The role of customer segments classification in direct marketing is to predict the segment of most valuable customers who is likely to respond to a campaign based on previous purchasing behavior. A good-performing predictive model can significantly increase revenue, but also, reduce unnecessary marketing campaign costs. As this segment of customers is generally the smallest, most classification methods lead to misclassification of the minor class. To overcome this problem, this paper proposes a class balancing approach based on Support Vector Machine-Rule Extraction (SVM-RE) and ensemble learning. Additionally, this approach allows for rule extraction, which can describe and explain different customer segments. Using a customer base from a company's direct marketing campaigns, the proposed approach is compared to other data balancing methods in terms of overall prediction accuracy, recall and precision for the minor class, as well as profitability of the campaign. It was found that the method performs better than other compared class balancing methods in terms of all mentioned criteria. Finally, the results confirm the superiority of the ensemble SVM method as a preprocessor, which effectively balances data in the process of customer segments classification.

Keywords: direct marketing, customer classification, class imbalance, SVM-Rule Extraction, ensemble.

DOI: <https://doi.org/10.2298/CSIS200530052R>

46. CUSTOMER RESPONSE MODEL IN DIRECT MARKETING: SOLVING THE PROBLEM OF UNBALANCED DATASET WITH A BALANCED SUPPORT VECTOR MACHINE

Rogić, S., Kaščelan, Lj. & Pejić Bach, M. (2022). Customer Response Model in Direct Marketing: Solving the Problem of Unbalanced Dataset with a Balanced Support Vector Machine. *Journal of Theoretical and Applied Electronic Commerce Research*, 17(3), 1003-1018.

Abstract

Customer response models have gained popularity due to their ability to significantly improve the likelihood of targeting the customers most likely to buy a product or a service. These models are built using databases of previous customers' buying decisions. However, a smaller number of customers in these databases often bought the product or service than those who did not do so, resulting in unbalanced datasets. This problem is especially significant for online marketing campaigns when the class imbalance emerges due to many website sessions. Unbalanced datasets pose a specific challenge in data-mining modelling due to the inability of most of the algorithms to capture the characteristics of the classes that are unrepresented in the dataset. This paper proposes an approach based on a combination of random undersampling and Support Vector Machine (SVM) classification applied to the unbalanced dataset to create a Balanced SVM (B-SVM) data pre-processor resulting in a dataset that is analysed with several classifiers. The experiments indicate that using the B-SVM strategy combined with classification methods increases the base models' predictive performance, indicating that the B-SVM approach efficiently pre-processes the data, correcting noise and class imbalance. Hence, companies may use the B-SVM approach to more efficiently select customers more likely to respond to a campaign.

Keywords: customer response model, support vector machine, data pre-processing, direct marketing, data mining, unbalanced data.

DOI: <https://doi.org/10.3390/jtaer17030051>

47. AUTOMATIC CUSTOMER TARGETING: A DATA MINING SOLUTION TO THE PROBLEM OF ASYMMETRIC PROFITABILITY DISTRIBUTION

Rogić, S., Kaščelan, Lj., Kaščelan, V. & Đurišić, V. (2022). Automatic customer targeting: a data mining solution to the problem of asymmetric profitability distribution. *Information Technology and Management*, 1-19.

Abstract

This paper proposes a data mining approach for automatic customer targeting based on their expected profitability. The main challenge with customer profitability prediction is asymmetry, i.e., skewness of the distribution, because the number of highly profitable customers is very small compared to others. Although data mining methods are more resistant to sample heterogeneity than statistical ones, due to strong skewness, the accuracy of predictions often decreases as the value of profit increases. These few customers are actually outliers which can make data-driven methods to overestimate predicted amounts, but on the other hand, they contain very important information about the most valuable customers, so it is not advisable to remove them. In this paper, a data mining approach for overcoming these problems is proposed. The results show that the relative error in predicting the absolute amount of the profitability of the most valuable customers is very small and does not differ much from the error for other customers, unlike previously applied methods where predicting high profitability was less accurate. Accordingly, the specific implication of the high accuracy is more efficient identification of the most profitable customers, which ultimately make a greater contribution to the company in terms of revenue. Also, due to the good precision of the model, errors in the assessment of highly profitable and risky customers are reduced, which leads to savings in unnecessary costs for the marketers.

Keywords: Customer profitability, Marketing analytics, Data mining, Support vector regression

DOI: <https://doi.org/10.1007/s10799-021-00353-5>

48.SIMULATION OF DISEQUILIBRIUM AND CHAOS IN AGGREGATES OF DISPOSABLE INCOME, WEALTH, AND CONSUMPTION IN EU MACROECONOMICS USING NON-LINEAR DYNAMIC ANALYSIS

Sindik, D.V., **Kaščelan, V., Kaščelan, Lj.** (2022). Simulation of disequilibrium and chaos in aggregates of disposable income, wealth, and consumption in EU macroeconomics using nonlinear dynamic analysis. *Simulation*. 00375497221130100

Abstract

Economic disequilibrium theory (DT) more realistically represents modern macroeconomic systems than general equilibrium theory. DT coupled with applied mathematical economics and nonlinear dynamical analysis generates multi-dimensional phase spaces. Interdependencies of endogenous variables in state space create a flow of different and “parallel economic reali-

ties," which depend on the initial conditions. By modeling variable changes using the nonlinear least squares (NLLS) method, we define the first-order nonlinear ordinary differential equation (NODE) system. The NODE system is impossible to solve analytically. The numerical solution and visualization requires the MATLAB software package, combined with its specialized applications pplane (two-dimensional (2D)) and MATCONT (three-dimensional (3D)). By analyzing the evolution of flow operators, we can predict the future qualitative behavior of the entire system, determine the model-optimal values, and perform inverse modeling for variables. The obtained data advocate better and more stable macroeconomic paths that economic policy-makers can pursue. The proposed methodology's boundaries have strong links to chaos theory. Chaotic behavior can arise after a certain number of periods. We found very high computation accuracy, transformation of discrete variables to continuous functions, and the implementation of high-order polynomial data fitting offset its effects in part and to some reasonable degree.

Key words: Disequilibrium theory, nonlinear dynamic analysis, chaos theory, simulation of EU macroeconomic, long-term prediction.

DOI: <https://doi.org/10.1177/00375497221130100>

49. POLITICS AND NEW MEDIA IN EX/COMMUNIST STATES – THE EXAMPLE OF MONTENEGRO

Sćekić, R., **Lakić, S.** & Pejanović, A. (2021). Politics and new media in ex/communist states—the example of Montenegro. *Kybernetes*. Vol. 51 No. 1, pp. 383-402.

Abstract

Purpose: This study aims to explore the use of evolutionary and institutionalization models to understand the technical progression of sustainability in political organizations and their contribution to sustainable effectiveness. It describes the evolution of mass media, political marketing, in the organization's strategy and design and the methods it is using to institutionalize this political and transition change.

Design/methodology/approach: The study describes models of sustainability evolution and political and technical change, in political and social life in transition state Montenegro.

Findings: Online and internet presentations of political programs, political blogs, sites that promote the national history and culture of the desired perception – the achievements have

already risen in Montenegro in the first decade of the new millennium and beyond. Internet presentation of political subjects are reduced mainly to a brief presentation of history and of political parties, and mostly during the current election campaign, serving to inform the public about the program and promotion announcements.

Originality/value: The findings of this study will help senior executives with responsibility for transition states. The aim of this paper is to show the transformation of the media during the transition period from one political system to another. With the use of descriptive methodological postulates and numerous case studies. With a wealth of facts and examples, which contributes to the originality and value of the article. The significance and originality of this research and article is reflected in a comprehensive and multidisciplinary approach to the transition process and quantitative and qualitative development of the media.

Keywords: politics, social networks, history, social change, high tech, medias, political marketing, Montenegro, transition, pandemic

DOI: <https://doi.org/10.1108/K-06-2020-0376>

50. SOCIOECONOMIC DETERMINANTS OF LOCAL FISCAL SUCCESS – THE CASE OF MONTENEGRIN MUNICIPALITIES

Šehović, D., Konatar, M., Smolović, J. C. & Đurašković, J. (2021). Socioeconomic Determinants of Local Fiscal Success-The Case of Montenegrin Municipalities. *Lex Localis*, 19(3), 689-703.

Abstract

The aim of this paper is to determine the direction and scope of the impact of socio-economic determinants on the fiscal success of Montenegrin municipalities. The research model is conducted in a panel data framework, using traditional methods. The study covers the period 2009-2018. The model considers the correlation of fiscal success in 23 Montenegrin municipalities (from the Northern, Central and Southern regions) with social (number of citizens or population, number of pensioners) and economic (unemployment, taxes, grants, level of public debt) determinants. According to the results of the analysis, almost all determinants have a significant impact on fiscal success. Tax revenues, as a measure of fiscal decentralization, have a statistically significant positive impact on fiscal success, while the unemployment rate, the number of citizens and the number of retired persons have demonstrated a negative impact.

Keywords: fiscal success, municipality, fiscal decentralization, panel data approach.

DOI: [https://doi.org/10.4335/19.3.689-703\(2021\)](https://doi.org/10.4335/19.3.689-703(2021))

51. INFORMATION TECHNOLOGY AND GEN Z: THE ROLE OF TEACHERS, THE INTERNET, AND TECHNOLOGY IN THE EDUCATION OF YOUNG PEOPLE

Szymkowiak, A., **Melović, B.**, Dabić, M., Jeganathan, K. & Kundi, G. S. (2021). Information technology and Gen Z: The role of teachers, the internet, and technology in the education of young people. *Technology in Society*, 65, 101565.

Abstract

Technological progress has influenced the way we acquire knowledge and learn. On the other hand, the Internet provides fast access to information technology in different fields and thus, improves efficiency and saves time. The importance of online technology is especially emphasized in new methods for learning and education. This is particularly important among Generation Z ("Gen Z"), which derives knowledge from the Internet and is focused on a quick search of information. The aim of this paper is to determine how technology and the Internet affect the acquisition of knowledge by Generation Z, and which forms of knowledge acquisition this generation prefers. In our paper, the problem concerns various forms of learning and acquiring knowledge. Research was conducted among 498 young people actively using an online peer-to-peer knowledge-sharing community. The results of ANOVA analysis showed the respondents being more partial towards learning via mobile applications and video content over the traditional form. It also discovered that the students tended to emulate their teachers who integrated modern technologies into their curriculum and used it outside classroom hours for learning. The results of this research make several important theoretical contributions to the gap in knowledge acquisition by Gen Z, and provide several important practical recommendations for educators.

Keywords: Technology, Internet, Gen Z, Knowledge.

DOI: <https://doi.org/10.1016/j.techsoc.2021.101565>

52. Improving Structure Based Models For Predicting Chemical Functions And Weight Fractions In Cosmetic Products Using Ensemble Support Vector Machine

Vojinović, T., **Kaščelan, Lj.**, Potpara, Z., Radonjić, N. & Kaščelan, Z. (2022). Improving Structure Based Models For Predicting Chemical Functions And Weight Fractions In Cosmetic Products Using Ensemble Support Vector Machine. *Farmacia*, Vol. 70, 2.

Abstract

Through usage of a large number of cosmetic products, consumers are very often exposed to toxic chemicals. This paper aimed to propose a model for the prediction of chemical functions and weight fractions in these products based on the structural and physico-chemical properties of the substances. Due to the imbalance of classes we used Support Vector Machine (SVM) method, which can complement a smaller class with the examples that are most similar to it and identify the examples that are most different. The generality of the SVM method was additionally enhanced by combining it with ensemble Bootstrap Aggregation (Bagging). The research results showed that the proposed bagging SVM method can overcome the disadvantages of previously applied methods. Furthermore, it can help address the lack of information needed to assess exposure to risk from the use of cosmetic products containing toxic chemicals in their composition. The proposed models can be applied to predict whether a certain chemical may be a substitute for a function performed by another possibly toxic chemical in a cosmetic product, as well as to determine the quantity proportion of a certain dangerous chemical on the basis of its chemical structure and physico-chemical properties.

Keywords: Support Vector Machine (SVM), chemical functions, cosmetic products, toxic chemicals

DOI: <https://doi.org/10.31925/farmacia.2022.2.17>

53. ARITHMETIC–GEOMETRIC INDEX AND ITS RELATIONS WITH GEOMETRIC–ARITHMETIC INDEX

Vujošević, S., Popivoda, G., Vukićević, Ž. K., Furtula, B. & Škrekovski, R. (2021). Arithmetic–geometric index and its relations with geometric–arithmetic index. *Applied Mathematics and Computation*, 391, 125706.

Abstract

The arithmetic–geometric index ($AG(G)$) was recently introduced as a modification of the well-known geometric–arithmetic index ($GA(G)$). This paper reports results on searching for extremal AG -graphs for various classes of simple graphs. Additionally, relations between these two indices are elaborated. Results on combinations $AG+GA$, $AG-GA$, $AG \cdot GA$, and AG/GA are given. The paper is concluded with four conjectures that have been derived based on computer investigations.

Keywords: Arithmetic–geometric index, Geometric–arithmetic index, Lower and upper bounds, Chemical trees.

DOI: <https://doi.org/10.1016/j.amc.2020.125706>

54. UNICYCLIC GRAPHS WITH EXTREMAL VALUES OF ARITHMETIC–GEOMETRIC INDEX

Vukićević, Ž. K., **Vujošević, S.** & Popivoda, G. (2021). Unicyclic graphs with extremal values of arithmetic–geometric index. *Discrete Applied Mathematics*, 302, 67-75.

Abstract

The j -vertex unicyclic graphs with extreme values of arithmetic–geometric index or AG index are determined for all values of j . The case regarding the extremal values of the AG index in the class of bicyclic graphs has been stated as open problem.

Keywords: arithmetic–geometric index, Degree-based graph invariant, Unicyclic graph.

DOI: <https://doi.org/10.1016/j.dam.2021.06.009>

55. SUBSTITUTION OF ANCHOR CURRENCY: CHALLENGES FOR TRADE BETWEEN IRAN AND ITS MAJOR TRADING PARTNERS

Zahmani, Z., **Jovović, M.**, Redžepagić, S. & Sinićaková, M. (2021). Substitution of anchor currency: challenges for trade between Iran and its major trading partners. *Technological and Economic Development of Economy*, 27(4), 833-851.

Abstract

The aim of the paper is to find out whether euro is a convenient substitution for U.S. dollar as an anchor currency for Iranian rial and whether this replacement would affect Iran's international trade positively. We explore these effects via Optimum Currency Area (OCA) theories using generalized least square from 2000 to 2018. Based on OCA index, euro would be a good substitution for U.S. dollar as an anchor for Iranian rial. In addition, gravity model and Generalized Method of Moments estimation confirm that substitution of U.S. dollar by euro would improve bilateral trade between Iran and its major trade partners especially the European Economic and Monetary Union (EMU). Furthermore, we confirm that a basket containing main currencies (euro, U.S. dollar, yuan, Russian rubble) would be more efficient than a single currency anchor however euro should be prominent in the basket. Such a change of anchor could positively contribute to reduction of transaction costs, diversification of external risk, rise of mutual trade exchanges between Iran and the EMU or the EU and consequent economic growth of trade partners. The paper contributes to the existing literature by comprehensive methodological approach how to identify an appropriate anchor currency.

Keywords: euro anchor, currency basket, international trade, OCA theory.

DOI: <https://doi.org/10.3846/tede.2021.14977>

56. ECONOMIC GROWTH DETERMINANTS IN NEW AND OLD EU COUNTRIES WITH FOCUS ON CONSTRUCTION

Žarković, M., **Četković, J.**, Redžepagić, S., **Đurović, G.**, Vujadinović, R., Živković, A. (2022). Economic growth determinants in new and old EU countries with focus on construction. *Technological and Economic Development of Economy*, 1-27.

Abstract

Classical, neoclassical, institutional and other schools have debated what is crucial for economic growth. Literature review related to economic growth models is extensive. The objective of our paper is to construct a model of economic growth determinants in EU countries, with focus on construction. Our model includes determinants that reflect the impact of construction on economic growth, which is the contribution to existing literature. It has been created for three groups of countries: EU28, old EU and new EU countries. We believe that this has improved the quality of the results and enabled a comparative analysis of the old

and new EU countries. In order to create a model, we used a strongly balanced panel of 28 EU countries in the period 1995–2019 and employed the difference-in-differences approach. Our results for EU28 confirm positive effect of industry, gross fixed capital formation, production in construction and cost construction index on GDP, while gross wages are statistically insignificant. FDIs have low negative impact on economic growth in EU28 and old EU, but statistically insignificant in new EU countries. CO2 is significant and positively correlated with economic growth in all countries. Based on empirical results, we propose policy relevance in concluding remarks.

Keywords: economic growth, construction, gross domestic product, differences-in-difference approach, new EU countries, old EU countries.

DOI: <https://doi.org/10.3846/tede.2022.17598>

57. EFFECTS OF RENEWABLE AND NON-RENEWABLE ENERGY CONSUMPTION, GHG, ICT ON SUSTAINABLE ECONOMIC GROWTH: EVIDENCE FROM OLD AND NEW EU COUNTRIES

Žarković, M., **Lakić, S., Četković, J., Pejović, B.**, Redžepagić, S., Vodenska, I. & Vujadinović, R. (2022). Effects of Renewable and Non-Renewable Energy Consumption, GHG, ICT on Sustainable Economic Growth: Evidence from Old and New EU Countries. *Sustainability*, 14(15), 9662.

Abstract

Balancing of different dimensions of development—economic, environmental, social, is an imperative of policies and strategies of sustainable growth, which are practiced today in the EU and globally. The main aim of our paper is to investigate the relationship between renewable (REC) and non-renewable energy consumption (NREC), greenhouse gas (GHG) emissions and share of ICT in total exports, on one hand, and GDP p.c. on the other. We created a model for EU countries divided in two groups—old and new EU members, by using PMG and ARDL models. Considering the size and structure of the sample of countries, the selected variables in the model and the relevant period (2000–2020), to a certain extent, we filled the research gap in the existing literature. Our results indicate that a 1% increase in the share of REC and ICT in total exports leads to GDP p.c. growth in the long run by 0.151% and 0.168% in old EU countries, i.e., 0.067% and 0.039% in new EU countries, respectively. Contrary, an increase of NREC by 1% has a significant and negative impact on GDP p.c. in the long run, in both groups, leading to a decrease of economic growth by 0.512% in the old and 1.306% in the new EU group. We find a 1%

increase of GHG emissions was accompanied by an increase of GDP p.c. in new EU countries by 0.939%, while that impact is insignificant in old EU countries in the long run. We conclude our paper with final remarks and policy implications.

Keywords: sustainable economic growth; renewable energy consumption; non-renewable energy consumption; GHG emissions; ICT; old and new EU countries; ARDL approach.

DOI: <https://doi.org/10.3390/su14159662>

ARTICLES PUBLISHED IN INTERNATIONAL JOURNALS – NOT INDEXED ON SCI/SCIE/SSCI/A&HCI list

58. DOMESTIC VS FOREIGN DIRECT INVESTMENT, ECONOMIC GROWTH AND PRODUCTIVITY IN SOUTHEAST EUROPE

Bačović, M. (2021). Domestic vs Foreign Direct Investment, Economic Growth and Productivity in Southeast Europe. *Academia Letters*, article 3757, str. 1-10.

Abstract

As foreign direct investment inflows become a more significant element of the country's gross fixed capital formation, this study aims to investigate its effect on output and productivity growth in relation to the effects of domestic investments. In this study, we used a sample of ten Southeast European countries and the period from 1995 to 2020. Applying the panel OLS fixed effect method, we found positive and significant relationship between both domestic investment and foreign direct inflows growth to GDP growth, but positive effect of domestic investment is higher in comparison to FDI inflows. The estimation results show positive and significant relationship between both domestic investment per employed person and foreign direct inflows per employed person growth to labour productivity (GDP per employed person) growth, and positive effect of domestic investment is also higher in comparison to FDI inflows. This should not discourage promotion of the international capital mobility, but should encourage stronger reliance on domestic savings and its importance.

DOI: <https://doi.org/10.20935/AL3757>

59. EXPORTS OF SERVICES, OUTPUT AND PRODUCTIVITY GROWTH IN EUROPE

Bačić, M. (2021). Exports of services, output and productivity growth in Europe. *Asian Development Policy Review*, 9(4), 209-219.

Abstract

In this study, we analyse the impact of service exports on GDP and productivity growth in a sample of thirty-eight European countries for the period 2000-2019. Descriptive statistics analysis of the panel data shows that growth in exports of goods is more positively related to GDP growth, total fixed assets growth and productivity growth, while growth in export of services is more positively related to employment growth. In addition, the analysis shows that the volume of exports (in terms of its share in relation to GDP) of knowledge-intensive services (information and communication, other business services, intellectual property) is higher in more developed countries (measured as GDP per person). The pooled panel OLS model (fixed effects) with GDP growth rate and labour productivity growth as the dependent variables shows a positive impact on GDP growth of exports of services, although the positive impact of growth in exports of goods is higher. It applies to labour productivity growth, with a larger positive impact from exports of goods than services.

Keywords: Exports of goods, Exports of services, Economic growth, Productivity, Knowledge-intensive services, Output.

DOI: <https://doi.org/10.18488/journal.107.2021.94.209.219>

60. PUBLIC DEBT AND ECONOMIC GROWTH: TWO PUBLIC DEBT MANAGEMENT SCENARIOS IN MONTENEGRO

Bačić, M. (2021). Public Debt and Economic Growth: Two Public Debt Management Scenarios in Montenegro. In *BH Economic forum*, Vol. 14, No. 1, pp. 89-115.

Abstract

Growing public debt is one of the biggest challenges faced by both developing and developed economies. Available research indicates the negative impact of public debt growth on economic growth. Applying the ordinary least squares method to the panel data for the countries of the Western Balkans and the period from 1998 to 2019, we found that one percentage

growth in public debt leads to a decrease in the GDP growth rate by 0.036 percentage points. In addition, an increase in public debt by one percentage point leads to a decrease in the productivity growth rate by 0.079 percentage points.

The results of the research for Montenegro as a case (two scenarios of fiscal policy and the period 2021-2040), showed that, if expenditures remain intact, due to the small difference between the forecasted average GDP growth rate in the period 2021-2040 and interest rates (assumed constant), such a scenario will lead to a slower change in the public debt-to-GDP ratio (23% decrease in two decades). In addition, the cost of interest on public debt in this scenario over the entire period is higher than 2% of GDP. If the fiscal policy is changed toward a reduction in government spending, the short-term GDP growth rate would be slightly reduced, but both the expenditures for interest (less than 2% of GDP) and public debt (decrease of 63% in two-decades) would be reduced significantly.

Although reduced government spending will have a negative impact on GDP growth in the short run, the country will benefit in the long run as reduced public debt will have a positive impact on GDP and productivity growth

Keywords: Public debt, Government expenditures, Economic growth.

LINK: <https://ef.unze.ba/OJS/index.php/BHF/article/view/219/140>

61. SECTORAL APPROACH IN OUTPUT GROWTH DECOMPOSITION AND ITS DETERMINANTS IN EUROPE

Bačović, M. (2021). Sectoral Approach in Output Growth Decomposition and its Determinants in Europe. *Management & Economics Research Journal*, 3(2), str. 1-21.

Abstract

The structural changes in Europe have occurred over the last several decades, reducing output share in the goods sector, while increasing its share in overall services. Applying the growth accounting approach, we decomposed output growth in the economy while following the sectoral approach, in ten individual sectors in twenty-six European countries, from 2000 to 2019. Our analysis shows that total factor productivity has accounted for almost half of the European countries' growth in output in the last two decades, with the other half primarily accounted for by increases in fixed asset growth and employment growth, while its variations among

sectors are significant. The output growth in the services sector is significantly more driven by employment growth than in the goods sector, leading to overall employment growth in the economy. Applying the panel pooled OLS model, we found that the relevance of expenditures for research and development is high and positive in all sectors, but higher in industry and knowledge-intensive services (information and communication, scientific activities) compared to all sectors average. To the best knowledge of the author, this is the first study presenting output growth decomposition estimates at the sectoral level for a selected group of countries, but also the first study presenting estimates of TFP in the total economy for a selected time period. In addition, this is the first study that presents the relevance of investment in research and development at the sectoral level in this specific time period and group of countries. Results of the study may be used in defining national policies priorities, as there are varieties among sectors in terms of their impact on employment and economic growth.

Keywords: Output Growth, Decomposition, Sectoral Approach, Total Factor Productivity. Research and Development.

DOI: <https://doi.org/10.48100/merj.2021.159>

62. QUALITY OF EDUCATION AND ECONOMIC GROWTH

Baćović, M., Pejović, B., Mirotić, T. (2021). Quality of Education and Economic Growth. *International Academic Journal*, 2(1), ISSN 2671-3748, str. 14-25.

Abstract

Education has an undeniable value for the overall progress. Although the expenditure on education and the share of tertiary education graduates in the total population increased over the past two decades in Europe, the quality of education did not. The sample mean PISA scores in 2018 were almost equal to its 2000 values, even lower on the reading and science scales. It applies to the Human Capital index, with lower values in 2020 compared to 2018. The descriptive statistics analysis shows a strong linear association between the quality of education, output structure, income per person, productivity growth and research and development activities. Applying the panel least square (fixed effects) model to the sample of thirty-five European countries and the period from 1995 to 2020, we found that the contribution to output growth by tertiary educated employees, as well as the outcome of investment in research and development is significant and positive. Due to the relevance of investment in knowledge and human capital for sustainable growth, as quality of education is strongly correlated with both

the share of persons with tertiary education and investment in research and development, its improvement is indispensable to foster economic growth.

Keywords: Quality of education, Tertiary Education, GDP growth, Labour productivity, Investment in research and development.

LINK: <https://ia-institute.com/journals/>

63.SOCIO-DEMOGRAPHIC IMPACTS ON THE PERSONAL SAVINGS PORTFOLIO CHOICE: A DECISION TREE APPROACH

Burić, M. N., Raičević, M., **Kaščelan, Lj.** & **Kaščelan, V.** (2022). Socio-Demographic Impacts on the Personal Savings Portfolio Choice: A Decision Tree Approach. *International Journal of Business Analytics (IJBAN)*, 9(1), 1-23.

Abstract

Insufficiently-developed financial systems, poor standards of living, and inappropriate education of citizens on the saving products lead to low levels of investment in the financial markets of developing countries. In this paper, special attention is paid to examining the socio-demographic profile of Montenegrin citizens who invest their funds in some of the offered forms of savings, as well as examining main factors that restrict their investment. For this purpose, data collected through the survey of Montenegrin citizens were processed using decision tree method. Survey results have shown that there is a low level of savings, as well as that citizens prefer deposits and life insurance products rather than pension plans and debt securities. Also, the results indicate that the main causes of the current state of savings in Montenegro are low standard of living, citizens' poor awareness, and the financial system, which causes the insufficiently attractive supply of savings.

Keywords Bank Deposits, Decision Tree Method, Financial Market, Life Insurance, Montenegro, Pension Plans, Securities, Survey.

DOI: <http://doi.org/10.4018/IJBAN.288511>

64.THREE DECADES OF MACROECONOMIC FLUX IN MONTENEGRO AND SLOVENIA

Gričar, S., Bojnec, S., **Karadžić, V.**, **Backović, T.** (2022). Three Decades of Macroeconomic Flux in Montenegro and Slovenia. *Montenegrin Journal of Economics*, Vol. 18, No. 2, pp. 61-71.

Abstract

The purpose of this research is to audit the time dependence of the long-run similarities in macroeconomic aspects. The macroeconomic flows in Montenegro and Slovenia, the two ex-Yugoslav countries, are analyzed. The historical time series data for two variables on gross domestic product (GDP) per capita and unemployment rate are used to obtain the best normally distributed data vector for prediction and discussion. The novelty of the results is that we have used 29 years of long-run annual data for both countries since the 1990s from various international statistical data sources, which are analyzed using applied econometric techniques, starting with regression analysis and concluded by the Granger Causality test. The null hypothesis approach is: unemployment rate does not cause GDP per capita and vice versa, or there is no statistically significant causal relationship. The empirical results confirm a statistically significant unidirectional causal relationship on two lags only for Montenegro, where unemployment causes national GDP per capita and not vice versa. On the other hand, no causal relationship was found for Slovenia. The empirical results may be important for policy makers as two macroeconomic aggregates were analyzed in the relationship between the level of economic development driven by economic growth and the unemployment rate.

Keywords: Granger Causality test, level of economic development, Montenegro, Slovenia, structural breaks in time-series, unemployment rate.

DOI: 10.14254/1800-5845/2022.18-2.6

65. Regional economic integration of the Western Balkans: from the CEFTA 2006 towards the EU single market

Đurović, G. (2022). Regional economic integration of the Western Balkans: from the CEFTA 2006 towards the EU single market. *Diplomacy Journal*, Issue 28, Bulgarian Diplomatic Institute, Sophia.

Abstract

The CEFTA 2006 aims to promote increasing cooperation among its economies, in order to prepare them for the EU membership. Overall key achievements of the CEFTA 2006 by 2021 are as follows: a) trade liberalization and significant reduction of non-tariff barriers: Since the signing of the CEFTA agreement in 2006, the Free Trade Area has played an important role in promoting international trade in South Eastern Europe. It has contributed to economic integration, trade

facilitation, the growth of regional trade flows and created a unified economic space attractive to foreign direct investors and mobility of professional service providers; b) international agreement with developed institutional structure and the CEFTA Secretariat in Brussels; gradual liberalization achieved based on international standards of negotiation and WTO rules; c) the CEFTA made trade easier in challenging times. Six protocols signed and in force; Dispute settlement protocol is in the process of negotiation; d) intra-regional trade has increased substantially in the fifteen years since the signing of the agreement while the share of trade within the region has also been on the rise; e) trade liberalization within CEFTA has promoted market competition and fostered integration across sectors and industries in the region; f) that has also encouraged FDI flows both from outside the region and from within; g) moreover, CEFTA has facilitated information sharing and collaboration with regard to customs and trade policies more generally, thus encouraging political dialogue, institutional approximation and capacity building among the Parties of the region; h) as elsewhere, the COVID-19 pandemic has adversely affected economic activity and trade in the region. This experience has highlighted the important role of intra-regional trade and the need for further regional cooperation and trade liberalization; i) within the proposed Common Regional Market new mechanisms to facilitate trade are being developed including mutual recognition of certificates and testing for industrial and agricultural products, Authorized Economic Operators (AEO), professional qualifications and financial services; j) new initiatives related to free trade in services, free movement of persons, regional e-commerce, and Green Lanes to ensure unimpeded flow of goods during the COVID-19 crisis are being launched; and k) further measures are being taken to remove non-tariff barriers and support competition regulators. The Leaders of Western Balkans endorsed the Multi-annual Action Plan on Regional Economic Area 2017-2020 in the Western Balkans (MAP REA), at the Trieste Summit held on 12 July 2017. The MAP REA, being the first regional mid-term economic cooperation and integration framework that has been endorsed at the highest level, generated some concrete results in its four areas (trade, investment, digital integration and mobility). Further, the leaders of the Western Balkans Six endorsed the Common Regional Market (CRM) 2021-2024 Action Plan at the Berlin Process Summit held on 10 November 2020 in Sofia. The first concrete result was the free roaming area since July 2021. Key challenges are as follows: a) beside the lack of political will and efforts to improve overall regional cooperation, and existing political sensitivities, key challenges are emergences of a new regional initiatives such as “Open Balkan” which are not supported by all economies in the Region; b) the CRM 2021-2024 is medium term plan and needs more time to pass on its implementation in order to concretely criticize it; and c) key barrier for faster regional integration through the CRMP AP are unsolved relations between Belgrade and Pristine. The EU itself will soon have to reconsider its views and decide, whether it will support the Open Balkans initiative and put pressure on the other three parties to join, or insist on unblocking the implementation of the Action plan for Common regional market under Berlin process which is linked with the EU pre-accession support.

66. WAR IN UKRAINE AND IMPLICATIONS FOR MONTENEGRO'S EU MEMBERSHIP

Đurović, G. (2022). War in Ukraine and implications for Montenegro's EU Membership. *ACM Briefs*, Atlantic Council of Montenegro.

Abstract

Uncertainty over the future course of the EU enlargement policy in the Western Balkans region really matters. After more than two decades of stabilization and accession process, and years of the stagnation of the EU integration dynamic, there are a few different opinions regarding the impact of war in Ukraine on that EU policy. After Ukraine, Georgia, and Moldova submitted the application for EU membership in March 2022, the previously evident differences among Western Balkan aspirants with a clear European perspective given in Thessaloniki in 2003, and Eastern neighbors without that promise – are somehow disappearing. The key question is the following: Does the EU plans to extend its absorption capacities for the enlargement towards Eastern neighbors or, on the contrary, to postpone them, through differentiated or staged accession for an undefined period? We study how these unprecedented security challenges that united Europe, impact the EU integration dynamic. Our focus is on Montenegro, especially considering the strong Russian influence and a very delicate political and social moment in the country. An optimistic conclusion could be that the EU's 2025 enlargement agenda is still achievable for Montenegro. Otherwise, a long journey to the Union alongside our neighbors from the Western Balkan convoy awaits us.

LINK: <https://ascg.me/en/publications/>

67. RELEVANCE OF OKUN'S LAW IN MONTENEGRO

Karadžić, V., Backović, T. & Streimikis, J. (2021). Relevance of Okun's Law in Montenegro. *Montenegrin Journal of Economics*, 17(1), 59-69.

Abstract

The purpose of this paper is to examine whether the Okun's law is valid in case of Montenegro. This paper investigates short-term and long-term relationships between unemployment rate and economic growth in Montenegro with the goal to estimate the Okun's coefficient. In this research Okun's law was tested by implementing the first difference model. The analysis has been carried out according to standard econometric methodology considering static and dynamic regression model specifications. In the first part of the analysis, the two analyzed series are tested for sta-

tionary and co-integration and then the classical linear regression model was estimated. In the second part of the analysis the Error Correction Method (ECM) was applied, which in addition to quantifying the relationship between the unemployment rate and the economic growth rate, also enables the unemployment rate forecasting. The key finding of this paper is that the value of unemployment rate will decrease by 0.275534% in short term and by 1.46794% in long term for every 1% increase in economic growth rate. This implies that the Okun's law is valid in Montenegro.

Keywords: Unemployment, GDP, Okun's law, co-integration, error correction model.

DOI: 10.14254/1800-5845/2021.17-1.4

68. PROFITABILITY DETERMINANTS OF BIG EUROPEAN BANKS

Karadžić, V., Đalović, N. (2021). Profitability Determinants of Big European Banks. *Journal of Central Banking Theory and Practice*, Vol. 10, No. 2, 39-56.

Abstract

The subject of research in this paper is the profitability of the biggest banks in the European financial market, some of which operate in Montenegro. The profitability of banks is influenced by a large number of factors, including internal banking and external macroeconomic factors. The aim of this paper is to use statistical and econometric methods to examine which factors and with what intensity affect the profitability of large banks in Europe. The empirical analysis used highly balanced panel models with annual data on 47 large banks from 14 European countries over the period 2013-2018. Three static panel models were estimated and evaluated (pooled ordinary least squares, model with fixed effects and model with random effects), as well as dynamic model utilizing general methods of moments. The POLS model was chosen as the best, confirming that all macroeconomic factors have a statistically significant impact on the profitability of big banks, while the impact of internal factors, which are controlled by the bank's management, is not significant. GDP growth rate, inflation rate and market concentration have a positive effect on profitability, while the membership of the European Union has a negative impact on profit, meaning that banks with headquarters outside the EU are more profitable.

Keywords: bank profitability, big banks, macroeconomic variables, panel analysis, static models, GMM model.

DOI: 10.2478/jcbtp-2021-0013

69. "SECOND CURVE" CONCEPT AS A KEY DRIVER OF ECONOMIC DEVELOPMENT IN THE EMERGING MARKETS

Lojpur, A., Radević, I. & Martinović, N. (2021). "Second curve" concept as a key driver of economic development in the emerging markets. *Management: Journal of Contemporary Management Issues*, 26(Special Issue), 101-119.

Abstract

The paper begins with the understanding that the three-decade-long transition period from a socialist economy to the market one, as an integral part of comprehensive changes in Eastern Europe, both political and ideological ones, remains to be a quite problematic and ongoing process. When it comes to less-developed or transition countries, with a special focus on the Western Balkans, a popular opinion is that the impact of deindustrialization on countries in transition was as painful and radical as the "coming" of socialism. Therefore, when addressing the need for a new formula for development, it is a matter of great concern that today's multipolar world lacks well-established development paradigms, particularly taking into account an obvious stagnation in reforms, i.e. the so-called reform failure. In the authors' opinion, it is possible to end the crisis in underdeveloped and transition countries only by introducing a "new" order, i.e. by finding a "new" economic development paradigm. In the light of the above, this paper indicates the need to replace the current transitional models of economic transformation with a turn-around strategy that would be based on reindustrialization, i.e. newly created industrial policies. Finally, this would imply the implementation of the "second curve" (the "S-curve") concept in the change management processes.

Keywords: globalization, management, neoliberalism, new industrial policies, second curve ("S-curve").

DOI: <https://doi.org/10.30924/mjcmi.26.si.6>

70. PROACTIVE CAREER PLANNING IN THE MARITIME INDUSTRY: ENHANCING MILLENNIALS' WORKPLACE ENTHUSIASM IN MONTENEGRO AND TURKEY

Melović, B., Šekularac-Ivošević, S., Muslu, A., Backović, T. & Dabić, M. (2022). Proactive Career Planning in the Maritime Industry: Enhancing Millennials' Workplace Enthusiasm in Montenegro and Turkey. *NAŠE MORE: znanstveni časopis za more i pomorstvo*, 69(1), 40-52.

Abstract

This paper seeks to examine the attitudes of millennial maritime students when it comes to career planning and proactive behavior, in order to efficiently, effectively develop each students' potential, and direct the activities of decision-makers (maritime companies and educational institutions). This research was based on a purposefully developed conceptual model and empirical research conducted on a sample of 308 students from Montenegro and Turkey. The research relied on a referential career engagement scale. The relevance of the hypotheses was tested by means of SEM model, logistic regression, Kruskal-Wallis test and eta coefficient. The results obtained show that proactive behavior of maritime students is a consequence of their attitudes established concerning career development. However, the attitudes of students vary depending on their country of origin and the year of their studies. Thus, through the influence on attitudes these two factors indirectly affect the proactive behavior of students. This emphasizes the possibility to foster students' proactive behavior regarding maritime career planning through effectively management of public policies of the country, especially those related to the educational system. These findings explain the relationships between the students and their career planning and proactive behavior, strengthening the students' competitiveness on the market. Therefore, the paper provides a significant contribution in offering insights to decision-makers and the creators of educational policies.

Keywords: maritime career planning, proactive behavior, Montenegro, Turkey.

DOI: <https://doi.org/10.17818/NM/2022/1.6>

71. ANALYSIS OF THE IMPACT OF MACROECONOMIC STABILITY ON THE LEVEL OF GLOBAL COMPETITIVENESS OF WESTERN BALKAN COUNTRIES

Milović, N., Jović, M. & Martinović, N. (2021). Analysis of the Impact of Macroeconomic Stability on the Level of Global Competitiveness of Western Balkan Countries. *Journal of Central Banking Theory and Practice*, 2, 23-37.

Abstract

Competitiveness, as a complex concept, can be observed in different ways, from the perspective of an individual, group, company and/or state. The subject of this paper deals with competitiveness of national economies observed through factor analysis, with a particular focus on the level of macroeconomic stability. Through the application of the Analytical-Hierarchical

Process (AHP) method, special attention has been paid to the comparative ranking of Western Balkan countries. The ranking has been made in relation to macroeconomic stability and the positions of countries in the ranking of the World Economic Forum, based on the Global Competitiveness Index, for three defined periods of time. The paper identifies key factors that affect the competitiveness of Western Balkan countries. Research findings show that macroeconomic stability has a strong impact on the level of global competitiveness of national economies.

Key words: global competitiveness, macroeconomic stability, national economy, GCI, Western Balkans.

DOI: 10.2478/jcbtp-2021-0012

72.ASSESSING THE DEPENDENCE OF THE BALKAN COUNTRIES ON THE TOURISM ECONOMY: THE AHP APPROACH

Pejović, B. & Zarić, S. (2021). Assessing the Dependence of the Balkan Countries on the Tourism Economy: The AHP Approach. *Knowledge-International Journal*, 46(1), 17-22.

Abstract

The paper assesses the dependence of the economies of the Balkan countries on the tourism economy using the AHP method of multi-criteria decision-making (Analytical hierarchical process). When assessing dependence on tourism, a number of quantitative and qualitative criteria must be included in the decision-making process. Because in order to rank countries according to criteria that are mutually diverse and opposing, it is necessary to use multi-criteria decision-making approaches. The application of the AHP method took into account the criteria: the contribution of tourism to GDP, the growth rate of the tourism economy, the share of tourism in total employment, the expected growth rates of employment in tourism, the ratio of tourism and export revenues and the country's orientation towards tourism development. Based on these criteria, the countries are ranked: Albania, Bosnia and Herzegovina, Bulgaria, Montenegro, Greece, Croatia, Northern Macedonia and Serbia. When comparing the criteria, the contribution of the tourism industry to GDP is of the greatest importance, while the orientation towards the development of tourism has the least relative importance. Inconsistency in work is at the desired level and is less than 10%. According to the criterion of tourism's contribution to GDP, Albania is on the first place, Serbia on the last place. According to the share of tourism in the total employment, Greece is on the first place, and Serbia on the last place. According to the share of tourism in the total export, Montenegro is on the first place, and Northern

Macedonia on the last place. According to the criterion of the expected growth rate, Greece is on the first place, and Montenegro on the last place. According to the achieved growth rate of the tourism industry, Montenegro is in the first place, while Serbia is ranked the worst. According to the criterion of orientation towards the development of tourism, Albania is on the first place, and Bulgaria on the last. Taking into account the relative weight of the criteria, as well as the ranking of countries according to all criteria according to the dependence on the tourism economy, the Balkan countries are ranked as follows: Albania, with the highest dependence, then Croatia, Greece, Montenegro, Bosnia and Herzegovina, Bulgaria, North Macedonia and Serbia with the least dependence on the tourism industry. Assessing the impact of one industry on overall economic activity is very important in the case of external shocks. Diversification of the economic structure is desirable when countries are in an unpredictable and dynamic environment. The tourism industry is particularly exposed to these shocks. The COVID-19 pandemic has shown how dangerous it can be to focus on just one industry, such as tourism.

Keywords: tourism industry, Analytic Hierarchy Process, Balkan Countries, multi-criteria.

73. NEW AND OLD DUAL ECONOMY

Popović, M. & Radević, I. (2022). New and old dual economy. *Management: Journal of Contemporary Management Issues*, 27(1), 63-81.

Abstract

This paper aims to provide a possible explanation for the strange reoccurrence of the dual economy in developed countries. The dual economy is understood as consisting mainly of two sectors that differ in productivity, salaries, and related characteristics. It was hypothesized there is a relationship between secular stagnation, the slowdown in productivity growth, stagnation in wages, and the dual economy's reoccurrence. In explaining this relationship, technological progress and the process of globalization, which have been prevalent in recent decades, play a crucial role. It is concluded that the era of the new dual economy and the productivity paradox represents a particular phase of economic growth. Since the phenomenon of the reoccurrence of the dual economy in developed countries has been noticed and studied only recently, further research is needed, focusing on the empirical studies.

Keywords: dual economy, productivity paradox, secular stagnation.

DOI: <https://doi.org/10.30924/mjcmi.271.5>

74. NATIONAL COMPETITIVENESS AND FOREIGN DIRECT INVESTMENT IN EMERGING EUROPE

Randelović, S. & **Martinović, N.** (2022). National Competitiveness and Foreign Direct Investment in Emerging Europe. *Economic Themes*, 60(1), 21-40.

Abstract

The paper evaluates the relationship between the indicators of competitiveness of national economies (real unit labour costs and Global Competitiveness Index) and the flow of FDI in Central and Eastern Europe (CEE) over the last two decades. Our results show that from 2000 to 2020, CEE economies had an average annual inflow of FDI of 3.9% of GDP, with significant variation across the region. We have found out that the relationship between the net inflow of FDI and the real unit labour costs was strongly negative, while the results on the link with the Global Competitiveness Index was less conclusive. In 2020, due to pandemic global flow of FDI, shrank by around 40%, while the net inflow of FDI to CEE countries declined on average by 15%. These trends and results of survey-based analyses from other studies suggest that CEE region, and especially the Western Balkans countries, may benefit from the near-shoring process in the future. To exploit that opportunity, they may need to put focus of their policies on efficiency-enhancing tax reforms (that would reduce the unit labour costs) and other structural reforms that would result in improvement of the stock and quality of their physical and human capital.

Keywords: national competitiveness, foreign direct investment; emerging Europe, global competitiveness index, real unit labour costs.

DOI: 10.2478/ethemes-2022-0002

75. SEGMENTATION APPROACH FOR ATHLEISURE AND PERFORMANCE SPORT RETAILERS BASED ON DATA MINING TECHNIQUES

Rogić, S. & Kaščelan, Lj. (2021). Segmentation Approach for Athleisure and Performance Sport Retailers Based on Data Mining Techniques. *International Journal of E-Services and Mobile Applications (IJESMA)*, 13(3), 71-85.

Abstract

This paper seeks to compare certain customer segments from two sport footwear, apparel, and equipment retailers and to examine an objective market segmentation method, based on the recency, frequency, monetary (RFM) and the decision tree (DT) models. The case study is based on two data sets, aiming to compare the different customer segments, both from sport retail industry, and represents an application of data mining techniques in a business environment. The customer segmentation enables the customer selection for the future direct marketing campaigns based on the previous purchasing behavior. Analyzing the customers' purchasing history can help the company determine the value of each customer and therefore target or not target such customers in the future with promotional materials, based on both the customers' interests and their value. Thus, based on the results, personalized offers can be created for each of the defined customer groups, which may increase the efficiency of the overall campaign, reduce costs, and increase profitability.

DOI: 10.4018/IJESMA.2021070104

76. MONTENEGRIN SPORT ASSOCIATIONS ON SOCIAL MEDIA-QUALITY OF PERFORMANCE ASSESSMENT

Rogić, S., Vukčević, M., Muhadinović, M. & Smolović, J. C. (2022). Montenegrin Sport Associations on Social Media-Quality of Performance Assessment. *Sport Mont*, 20(1), 9-14.

Abstract

The aim of this study is to assess the quality of performance of Montenegrin national sport associations on Facebook. As sport is recognized as an activity of public interest, and social media are one of the main sources of information nowadays, given that social media in sport has delivered a new style of communication, authors will try to evaluate the engagement with the fans and the general public. In this paper, Facebook Assessment Index (FAI) methodology will be applied. This methodology involves the analysis of three components: popularity (25%), interactivity (40%) and content (35%). Each of the criteria is evaluated depending on the importance of the indicator on a scale from 0% to 100%. Coefficient value closer to 100% indicates higher quality of performance on Facebook. The results of our paper show the differences between the three categories of Olympic sports in Montenegro, taking into account their performance on Facebook. Social media, as a marketing tool can enhance the positioning of national sport associations by creating a meaningful connection with the fans and the public.

Additionally, this connection may strengthen the feeling of devotion to the national team of Montenegro and incentivize younger generations to start training and competing. This study demonstrates which associations use this channel to portray their sport and results, with the aim of promoting sport and healthy lifestyle.

Keywords: social media, sport marketing, FAI methodology.

DOI: DOI 10.26773/smj.220202

77. IMPACT OF PREMIUM RESERVE ON LIFE INSURANCE INVESTMENTS IN THE WESTERN BALKANS

Tomašević, J., **Burić, M. N.**, **Kaščelan, Lj.** & **Kaščelan, V.** (2021). Impact of premium reserve on Life insurance investments in the Western Balkans. *Serbian Journal of Management*, 16(2).

Abstract

The growing importance of life insurance in the world imposes a greater need for research in this area, particularly in the Western Balkans where the trend of growth has been closely accompanied by life insurance for the past two decades. Taking into consideration that life insurance companies are significant participants in the financial market, this research paper examines the impact of the premium reserve on the volume of financial investments of life insurance companies in Western Balkan countries, based on aggregate data on country level. In order to test its effect, linear correlation and regression models were used, based on data collected for the period 2006-2016. Additionally, comparative analysis was used to compare the position of life insurance companies in financial markets. The results obtained by applying correlation and regression analysis showed that there is a strong positive correlation between premium reserve and financial investments in all of the aforementioned countries in the region. This result is an important strategic guideline for the regulators and policymakers to make advancements in the life insurance sector as well as in the financial market of the Western Balkans.

Keywords: premium reserve, financial investments, life insurance, regression, correlation.

DOI: 10.5937/sjm16-28022

78.IMPACT OF THE COVID-19 PANDEMIC ON FDI TRENDS – EXPERIENCES OF SERBIA

Tomić, M., Antonijević, M. & **Pejović, B.** (2021). Uticaj pandemije COVID-19 na kretanje SDI: iskustva Srbije. *Ekonomске ideje i praksa*, (42), 47-72.

Abstract

This study analyzes the impact of the crisis caused by the COVID-19 pandemic on economic trends, as well as the flow of foreign direct investment. The COVID-19 recession can be considered unique because it is the only one that since 1870 has been triggered exclusively by a pandemic. The impact of the new pandemic had a picture of comprehensive stagnation as well as the slowdown of the world economy, whose main visualizations are reflected in the systematic closure of economic activities around the world, where the closure of activities occurs in different sectors simultaneously. This research focuses on the impact of the global economic crisis caused by the COVID-19 pandemic on economic movements in the world and in the Republic of Serbia. The focus of this research is to determine the impact of the pandemic on foreign direct investments in Serbia, as well as the relationship of FDI with exports and imports. The general trend of FDI before the pandemic is characterized by a decline in 2019, with the global crisis caused by the pandemic contributing to a marked decline in FDI in 2020. FDI flow at the global level in 2021 had a tendency to grow compared to the previous year, with normalization of FDI flow expected only in 2022. Using three models, the authors determined that COVID-19 pandemic in Serbia had a statistically significant and negative impact on GDP per capita at a confidence level of 90%. On the other hand, the impact of COVID-19 on exports is not statistically significant. The results indicate that the unit growth of foreign direct investment consequently leads to higher growth of imports compared to exports.

Keywords: FDI, Covid-19, Economic Crisis, Macroeconomic Analysis, Serbia.

DOI: <https://doi.org/10.54318/eip.2021.mt.296>

79.EXPORT DIVERSIFICATION IN THE CEFTA 2006 REGION. A „U“ SHAPE PATTERN

Tomić, M., Uremović, N., Antonijević, M. & **Pejović, B.** (2022). Export Diversification in the CEFTA 2006 Region. A “U” Shape Pattern. *Knowledge-International Journal*, 51(1), 95-99.

Abstract

The main purpose of this paper is to evaluate patterns among export diversification along with

the economic development in the CEFTA 2006 region. The pattern, which is evaluated here, is a hump-shaped pattern, which states that diversification and re-concentration of export and has a „U“shape relationship with GDP per capita. Hump-shaped pattern suggests that countries add products to their export basket during the early stages of economic development, while high-income countries remove goods for which they have lost a comparative advantage. Consequently, countries are slower to specialize in exporting products in which they have a comparative advantage, which leads to a humpbacked appearance. It may be concluded that one of the driving forces for export diversification is certainly GDP per capita, where diversification and later re-concentration take place mainly through extensive margins. On the other hand, intensive margins do follow the same pattern as extensive margins. Furthermore, extensive margins represent export diversification to new markets, where intensive margins present export diversification of new products. Export diversification is closely related to commodity export dependence. The country is considered to be commodity export-dependent when more than 60 percent of its total merchandise exports are composed of commodities. In these terms, countries with lower export diversification usually suffer from slow development, non-diversified economic structures, macroeconomic instability, economic volatility, “Dutch disease”, political instability, poor political and economic governance, etc. Empirical studies reveal that export diversification can promote economic growth and reduce economic volatility. Greater diversification of exports contributes to greater resilience to exogenous shocks as well as stronger long-term growth and development of the country. With greater export diversification of products and greater geographical diversification (extensive and intensive margins), the risk of exogenous negative impacts is reduced. To test the U-shaped hypothesis, we used Herfindahl–Hirschman index as a measurement for export diversification. In this paper, we used secondary data from the UNCTAD stat database for export. Data for GDP per capita were gathered from the World Bank database. After calculating the mentioned index for export diversification/specialization for CEFTA 2006 region, we presented a link between mentioned indexes with GDP per capita. Our results reject the null hypothesis, which states that there is a U-shaped relationship between export diversification and GDP per capita in the CEFTA 2006 region. In the CEFTA 2006 region, countries do not follow the path of higher diversified export at lower GDP per capita, and later specialization in exporting products with an increase of GDP per capita, in a product that which they have comparative advantages. The examined period in this paper was from 2007 to 2020 (13 years). Future studies could examine what the main drivers for export diversification are in CEFTA 2006 region. Also, it would be interesting to examine which margins, extensive or intensive, are the main drivers for diversification and later re-concentration at an individual level of each country.

Keywords: export, diversification, specialization, U shape, CEFTA 2006.

80.COMPUTATION OF EDGE PI INDEX, VERTEX PI INDEX AND SZEGED INDEX OF SOME CACTUS CHAINS

Vujošević, S. (2022). Computation of edge Pi index, vertex Pi index and Szeged index of some cactus chains. *MATHEMATICA MONTISNIGRI*, Vol LIV.

Abstract

A cactus chain is a connected graph in which all blocks are cycles, each cycle has at most two cut-vertices and each cut-vertex is shared by exactly two cycles. In this paper we give exact values of edge PI index and vertex PI index of an arbitrary cactus chain and vertex Szeged index of some special types of cactus chains.

DOI: <http://doi.org/10.20948/mathmontis-2022-54-2>

81.APPLICATION OF GRAPH THEORY FOR THE PURPOSE OF DIVERSIFYING THE PORTFOLIO OF STOCKS ON THE BANJA LUKA STOCK EXCHANGE

Vujošević, S., Poljašević, J., **Lakićević, M.** (2022). Application of graph theory for the purpose of diversifying the portfolio of stocks on the Banja Luka stock exchange. *Financing – scientific magazine for economy*. ISSUE 2022, No. 2, Article 1.

Abstract

The graph theory has found great use in many areas, graphs can be used to model different problems. In economics various problems can be successfully solved by applying the graph theory. The use of graph theory in order to optimize the stock portfolio is useful. In this paper, we developed a characterization of the structure of the Banja Luka Stock Market from 2015. to 2021. By analysing the correlation between different stocks and applying the graph theory, “the best” portfolio was identified and a recommendation was given for the safest investments. This analysis allows diversification of the stock portfolio in order to avoid long term risk in the stock market.

Keywords: stock market, stock portfolio, portfolio optimization, graph theory, clique.

DOI: 10.7251/FIN2202003V

