

Saša Drezgić Alen Host Marko Tomljanović Saša Žiković

ECONOMICS AND BUSINESS OF THE POST COVID-19 WORLD

Research monograph - First Edition





Economics and business of the post COVID -19 world

Publisher:

University of Rijeka, Faculty of Economics and Business

For the Publisher:

Saša Drezgić

Editors:

Saša Drezgić Alen Host Marko Tomljanović Saša Žiković

Reviewers of Edition:

Zoran Grubišić Uroš Pintarić Branimir Skoko

Rewievers of Papers:

Dubravka Jurlina Alibegović Boštjan Antončić Ana Babić

Slađana Benković

Predrag Bijelić

Antonija Buljan

Borna Debelić

Maja Ivanović Đukić

Marija Đžunić

Tea Golja

Maja Grdinić

Ivan Gržeta

Pavle Jakovac

Radmila Janičić

Mirjana Jemović

Veljko Jeremić

Zoran Ježić

Branimir Kalaš

Dragana Radenković Jocić

Petra Karanikić

Hoda Mansour

Srdjan Marinković

Vesna Janković - Milić

Goran Milovanović

Igor Novaković

Primož Pevcin

Žarko Popović

Ana Poščić

Marko Primorac

Ognjen Radović

Snežana Radukić

Tamara Rađenović

Srdjan Redžepagić

Jelena Stanković

Tatjana Stevanović

Martina Solenički

Hrvoje Šimović Milan Deskar Škrbić Ana Štambuk Ivan Uroda Vinko Zaninović

Technical Editors:

Elizabeta Ribarić Sanja Jovanović

Proofreader:

Kristina Kaštelan

Graphic Design:

Grafika Helvetica for the Center for Electronic Publishing (CEN)

First Edition (2023)

100 copies

ISBN 978-953-7813-76-5

In compliance with the act issued by the Senate of the University of Rijeka (Class: 007-01/22-03/02, Registration number: 2170-57-01-22-424, on 22nd November 2022), this book is published as a part of the University of Rijeka edition.

The University of Rijeka covers the cost of this electronic publication carried out by the Center for Electronic Publishing (CEN).

INTERNATIONAL SCIENTIFIC CONFERENCE "ECONOMICS AND BUSINESS OF THE POST COVID-19 WORLD" - ECONOMICS OF DIGITAL TRANSFORMATIONS": June 23-25, 2021 – Rijeka – Opatija- Republic of Croatia

Organizer:

University of Rijeka, Faculty of Economics and Business, Rijeka, Croatia

Partners

Cleveland State University, Maxine Goodman Levin College of Urban Affairs, Cleveland, USA Universite Cote d'Azur, Balkan Institute of Science and Innovation, Nice, France University of Antwerp, Faculty of Applied Economics (TEW), Antwerp, Belgium University of Belgrade, Faculty of Economics, Belgrade, Serbia University of Coimbra, Faculty of Economics, Coimbra, Portugal University of Ljubljana, School of Economics and Business, Ljubljana, Slovenia University of National and World Economy (UNWE), Department of Finance, Sofia, Bulgaria

University of Sarajevo, School of Economics and Business, Sarajevo, Bosnia and Herzegovina Ural Federal University, Graduate School of Economics and Management, Ekaterinburg, Russia

Programme Committee:

President: Saša Drezgić, University of Rijeka, Faculty of Economics and Business, Rijeka, Croatia

Members:

Zhanna Belyaeva, Ural Federal University, Graduate School of Economics and Management, Ekaterinburg, Russia

Vesna Buterin, University of Rijeka, Faculty of Economics and Business, Rijeka, Croatia **Cathy Yi-Hsuan Chen**, Humboldt-Universität zu Berlin, School of Business & Economics, Berlin, Germany

Shieh Chich-Jen (Charles), College of Quantitative Economic, Huaqiao University, Xiamen, Fujian, China

Antonio Portugal Duarte, University of Coimbra, Faculty of Economics, Coimbra, Portugal **Tea Golja**, Juraj Dobrila University of Pula, Faculty of Interdisciplinary, Italian and Cultural Studies, Pula, Croatia

Wolfgang Karl Härdle, Humboldt-Universität zu Berlin, Institute for Statistics und Econometrics School of Business and Economics, Berlin, Germany

Ned W. Hill, John Glenn College of Public Affairs, Columbus, Ohio, USA

Alen Host, University of Rijeka, Faculty of Economics and Business, Rijeka, Croatia

David S. Hulse, University of Kentucky, Gatton College of Business and Economics, Lexington, USA

Maja Klun, University of Ljubljana, Faculty of Administration, Ljubljana, Slovenia

Kemal Kozarić, University of Sarajevo, School of Economics and Business, Sarajevo, Bosnia and Herzegovina

Iryina Lendel, Cleveland State University, Maxine Goodman Levin College of Urban Affairs, Cleveland, USA

Andrija Mihoci, Brandenburg University of Technology Economic Statistics and Econometrics, Germany

Katarina Ott, Institute of Public Finance, Zagreb, Croatia

Almir Peštek, University of Sarajevo, School of Economics and Business, Sarajevo, Bosnia and Herzegovina

Saša Ranđelović, University of Belgrade, Faculty of Economics, Belgrade, Serbia Nina Begičević Ređep, University of Zagreb, Faculty of Organization and Informatics, Varaždin, Croatia

Srdjan Redzepagic, University of Nice Sophia Antipolis, Nice, France

Danijela Sokolić, University of Rijeka, Faculty of Economics and Business, Rijeka, Croatia **Silvia Trifonova**, University of National and World Economy (UNWE), Department of Finance, Sofia, Bulgaria

Davor Vašiček, University of Rijeka, Faculty of Economics and Business, Rijeka, Croatia Sunčica Vujić, University of Antwerp, Faculty of Applied Economics (TEW), Antwerp, Belgium Saša Žiković, University of Rijeka, Faculty of Economics and Business, Rijeka, Croatia Josef Windsperger, University of Vienna, Faculty of Business, Economics and Statistics, Vienna, Austria

Chen Ying, National University of Singapore, Faculty of Science, Department of Mathematics, Singapore, Singapore

Organizing Committee:

President: Marko Tomljanović, University of Rijeka, Faculty of Economics and Business, Rijeka, Croatia

Members:

Dorjana Dodić, University of Rijeka, Faculty of Economics and Business, Rijeka, Croatia Mario Jakopanec, University of Rijeka, Faculty of Economics and Business, Rijeka, Croatia Pavle Jakovac, University of Rijeka, Faculty of Economics and Business, Rijeka, Croatia Diana Ježina Radovanović, University of Rijeka, Faculty of Economics and Business, Rijeka, Croatia

Eric Mičetić, University of Rijeka, Faculty of Economics and Business, Rijeka, Croatia Mihaela Mrvčić, University of Rijeka, Faculty of Economics and Business, Rijeka, Croatia Elizabeta Ribarić, University of Rijeka, Faculty of Economics and Business, Rijeka, Croatia Ana Marija Sikirić Simčić, University of Rijeka, Faculty of Economics and Business, Rijeka, Croatia

Ivan Uroda, University of Rijeka, Faculty of Economics and Business, Rijeka, Croatia

PARTNERS









C













SPONSORS



Faculty of Economics and Business Rijeka https://www.efri.uniri.hr/en



Ministry of Science and Education of the Republic of Croatia https://mzo.gov.hr/en



University of Rijeka http://iuri.uniri.hr/about-uniri/



University of Rijeka Foundation http://iuri.uniri.hr/const_func/ university-of-rijeka-foundation/



Ministry of Regional Development and EU Funds of the Republic of Croatia https://razvoj.gov.hr/



Embassy of the United States
Zagreb - Croatia
https://hr.usembassy.gov/



Zagreb County, Zagreb, Republic of Croatia https://www.zagrebacka-zupanija.hr/ The Unger Foundation

http://levin.urban.csuohio.edu/ unger/



European Commission, Horizon 2020 "FIN-TECH: A FINancial TECHnology training platform", -ICT-35-2018 CSA project

Project leader - Saša Žiković, PhD

https://www.efri.uniri.hr/en/fintech_financial_technology_financial_supervision_and_technology_compliance/1296/258

Scientific project entitled: Ulaganje u istraživanje i razvoj i konkurentnost Republike Hrvatske i zemalja Zapadnoga Balkana/ Investments in Research and Development and Competitiveness of the Republic of Croatia and the Western Balkans countries (reference number: ZP UNIRI 4/19). Funded by University of Rijeka, Rijeka, Republic of Croatia

Project leader - Marko Tomljanović, PhD

https://www.efri.uniri.hr/en/investments_in_research_and_development_and_competitiveness_ of_the_republic_of_croatia_and_the_western_balkans_countries/1499/260

UNIRI 2018 Scientific Project "Smart cities in the function of development of the national economy"

Project director – Saša Drezgić, PhD

https://www.efri.uniri.hr/en/smart_cities_in_function_of_development_of_national_economy/1306/259

Saša Drezgić Alen Host Marko Tomljanović Saša Žiković

ECONOMICS AND BUSINESS OF THE POST COVID-19 WORLD

Research monograph - First Edition

FOREWORD

Dear readers, authors, reviewers and colleagues,

The research monograph Economics and business of the post COVID-19 represents a fourth series in our digital transformation effort. We were fortunate to enjoy presentations by more than 50 researchers at the conference, mainly from the Central and Southeastern Europe region. As every year, the main goal of the research effort is to determine the main interdependencies between digitalization and economic dynamics. The social and economic disruptions caused by the pandemic were not only a temporary shock, but also have long-term consequences. However, in addition to the negative effects, we have also seen a significant increase in digitization processes in all areas of society

The conference was organized from June 24 to 26, 2021 (www.edtconference.com). The main theme of the conference was related to the social and economic dynamics after the crisis COVID-19. This year we were honored to have the keynote lecture by the distinguished professor Brad DeLong from the University of California, U.C. Berkeley, Berkeley, California, USA. We also had two conference panels, as we do every year. One related to the field of smart cities under the theme New Future of Urban Life, where we had the opportunity to hear presentations by Nicholas Zingale from Maxine Goodman Levin University of Urban Affairs, Cleveland State University, USA, on Are smart cities being smart enough about advanced technology and the future of city life? and Network IQ and the Future of Work by Daria Tatai, Tatai Innovation. The presentations were followed by a discussion with Jelena Stanković, University of Niš, Faculty of Economics, Serbia, and Jason Papathanasiou, University of Macedonia, Greece. The panel discussion was moderated by Saša Drezgić, University of Rijeka, Faculty of Economics, Republic of Croatia.

This year's Unger Family Foundation panel focused on The World After Covid, chaired by Andrej Kričković, Higher School of Economics, Moscow, Russia, and discussant Al Saracevic - Editor-in-Chief of the San Francisco Examiner. The panel featured four presentations by Predrag Pale, University of Zagreb, Faculty of Electrical Engineering and Computer Science, Zagreb, Republic of Croatia; Kristijan Kotarski, University of Zagreb, Faculty of Political Science, Zagreb, Republic of Croatia; Gracielle Li, University of California, Berkeley, California, USA; and Andrei Eydlin, Higher School of Economics, Moscow, Russia. As always, the panel had a transdisciplinary focus on the consequences of the pandemic. The final day of the conference featured a panel on the state of play in financial and monetary issues, with Boris Vujčić, Governor of the Croatian National Bank, and Ante Žigman, Chairman of the Board of the Croatian Financial Services Regulatory Authority, providing an outlook on the global and local dynamics of the financial sector.

We are deeply indebted to all our participants, sponsors, supporting institutions, partners and all members of the programme and organization team. It is a special honor that the President of the Republic of Croatia, Zoran Milanović, supported and opened the conference with his introductory

speech. We also thank Boris Vujčić, Governor of the Croatian National Bank, and Ante Žigman, Chairman of the Board of the Croatian Financial Services Supervisory Authority, for their continued support. We also thank Nicholas C. Zingale (Maxine Goodman Levin School of Urban Affairs, Cleveland State University), whose support made it possible to organize the panel discussion on smart cities. Our special thanks to Andrej Kričković, who moderated the Unger Family Foundation panel discussion, and to all the panelists. Finally, we thank the American Embassy in Zagreb and the Unger Foundation for providing a substantial grant that contributed greatly to the quality of the conference.

We are sure that the papers published in this monograph will be a valuable contribution to students and researchers in the field of economics.

Rijeka, July 2022

Editors

Table of Content

INTRODUCTION
CHAPTER 1
Dejan Bodul Workplace privacy and new technologies: Case study of ECHR jurisprudence as a guideline for time after COVID-19?
CHAPTER 2
Matija Damjan Pandemic-driven suspension of IP rights: A new way for promoting public policy objectives?
CHAPTER 3
Francesco Gaspari, Giuseppina Agata Di Guardo Distance learning as a test bed for administrative digitalisation in Italy during and after the Pandemic: The way forward between data protection and the surveillance capitalism issues
CHAPTER 4
Dionis Jurić, Antonija Zubović Online formation of limited liability companies
CHAPTER 5
Romina Alkier, Vasja Roblek, Nenad Petrović The emergence of smart touristic destinations and further development in the post-covid period
CHAPTER 6
Maja Matanić Vautmans, Filip Gelo Long term care (LTC) in Croatia: Current state, COVID-19 impact and development strategy
CHAPTER 7
Tomáš Hanák, Ivan Marović, Lucie Kopečková Impact of the Covid-19 pandemic on the operation of construction companies in the Czech Republic
CHAPTER 8
Jelena Mušanović, Jelena Dorčić Topic modelling of Croatian five-star hotel brands posts on Facebook using Latent Dirichlet Allocation
CHAPTER 9
Ana-Marija Stjepić, Dalia Suša Vugec How the application of technological innovations supports the healthcare industry in the COVID-19 pandemic?

CHAPTER 10	197
Lea Perinić, Nada Denona Bogović, Saša Čegar The role of social innovations in the green transition of cities	
CHAPTER 11	213
<i>Tanja Fatur Šikić, Djula Borozan</i> Meeting the low-carbon challenge: The role of EU energy policy	
CHAPTER 12	231
Helena Šlogar, Heri Bezić, Ivan Zagorac Digitalization of city services through smart applications and e-services	
CHAPTER 13	247
Viktorija Kunštek The potential for the digital transformation of the central state office for Croats abroad	
CHAPTER 14	265
Darwin Beletić, Nenad Vretenar Student's perception of robots in the workplace	
CHAPTER 15	283
Marko Brkić, Danijela Sokolić, Iva Zdrilić Critical success factors for implementation of ERP system in a public institution	
CHAPTER 16	301
Bono Beriša, Dejan Miljenović Evaluation criteria for "Portfolio Greenes" within financial retail products	
CHAPTER 17	317
<i>Iva Gregurec</i> Digital marketing activities during COVID-19 pandemic – database revie	W
CHAPTER 18	335
Lana Galić, Josipa Višić Integrating data science in business: Evidence from Croatia	
CHAPTER 19	355
Marko Tomljanović, Danijela Sokolić, Igor Cvečić Recent dynamics of the European labour market	
CHAPTER 20	375
Helena Blažić Smart city/local tax: Specific consumption/sales tax for the post COVID-7 Croatia	19
CHAPTER 21	393
Denis Buterin Optimal structure of taxation and response to COVID-19	
Obtimal structure of taxation and response to OO VID-13	

CHAPTER 22
Josip Grgić The role of EU funded financial instruments in addressing the COVID-19 crisis and post recovery period
CHAPTER 23
Neda Vitezić, Dejana Dojčinović Drilo Effectiveness of traditional going concern forecasting models based on financial indicators in Croatian economy
CHAPTER 24
Marko Vešligaj The process of fiscal decentralization in the Republic of Croatia in the conditions of the COVID-19 crisis
CHAPTER 25
<i>Hrvoje Jošić, Berislav Žmuk</i> COVID-19 as an ultimate stock market Black Swan
CHAPTER 26
Mario Pečarić, Šime Jozipović, Andrej Ilievski The expected impact of a digital euro on non-Eurozone EU member's states and EU candidate countries: The case of Croatia and North Macedonia
CHAPTER 27
Antonio Kuzmanić, Jasmina Dlačić Determinants of a sports fans' loyalty to a sports club
CHAPTER 28
Joško Marić Indebtedness and growth of the transition countries of the EU: When public debt affects negatively on economic growth?
CHAPTER 29
Carla Morrone, Luca Attias, Daniela Battisti, Giuseppe Iacono Italian digital transformation team: The relevance of the digital awareness
CHAPTER 30
Jasmina Popovska Contribution of European innovation scoreboard towards europeanization of innovation policies
CHAPTER 31
Filip Škunca Investment portfolio optimization using alternative investments
CHAPTER 32
<i>Marijana Oreb, Saša Drezgić</i> Role of government guarantee measures in COVID-19 crisis

ISBN 978-953-7813-76-5