

Jelena Marjanović

Faculty of Economics Pale,
University of East Sarajevo,
Bosnia and Herzegovina

✉ marjanovicjelena1991@gmail.com

THE COVID-19 CRISIS IMPACT ON THE BUSINESS OF COMPANIES IN BOSNIA AND HERZEGOVINA

УТИЦАЈ КРИЗЕ КОВИД-19 НА ПОСЛОВАЊЕ КОМПАНИЈА У БОСНИ И ХЕРЦЕГОВИНИ

Summary: *The research in this paper aims to examine the types and usefulness of the measures implemented by Bosnian companies to protect themselves from the COVID-19 crisis. All business entities, especially small businesses, faced hardships in performing operational activities and severe financial problems during the crisis. Their managers reacted differently to the consequences of the pandemic outbreak. A survey was conducted among Bosnian companies for research purposes, and its results indicated that defensive and innovative strategies were used equally to maintain business activity. The support of state institutions at all levels played an important role in cushioning the negative impact. Nevertheless, the innovative activities of the company, accompanied by the business digitization were even more significant.*

Keywords: COVID-19; crisis; state intervention; innovative strategies; digitization

JEL classification: D22, E24, E31, E62, M21

Резиме: *Циљ истраживања у овом раду је да се испитају врсте и корисност мјера које су босанскохерцеговачка предузећа имплементирала да би се заштитила од Кризе КОВИД-19. Сви привредни субјекти, а посебно мала предузећа, су се за вријеме кризе суочили с потешкоћама у обављању оперативних активности и са озбиљним финансијским проблемима. Њихови менаџери су на различите начине реаговали на посљедице настале избијањем пандемије. За потребе истраживања је спроведена анкета међу босанскохерцеговачким предузећима, а њени резултати су показали да су с циљем одржања пословне активности подједнако коришћене одбрамбене и иновативне стратегије. Важну улогу у амортизацији негативног удара је имала подршка државних институција на свим нивоима. Међутим, још значајније су биле иновативне активности предузећа праћене дигитализацијом пословања.*

Кључне рејчи: КОВИД-19; криза; државна интервенција; иновативне стратегије; дигитализација

ЈЕЛ класификација: D22, E24, E31, E62, M21

INTRODUCTION

The COVID-19 virus pandemic generated a crisis not only in the health sector but in the entire economy. To prevent the spread of the virus, measures were introduced to limit the movement of people and goods and ban gatherings, which caused a large drop in economic activity in early 2020. The business of certain companies was blocked because they were prevented from reaching consumers. In the financial sector, service activities have suffered the most: logistics, air transport, hospitality and tourism, and art and entertainment. In the short term, a sharp drop in income was recorded, and many companies were forced to lay off workers and suspend operations. On the other hand, sales of certain products, primarily food and hygiene, increased. As a result of panic and uncertainty, wondering how long the prohibition measures would last, the population tried to form stocks, so the trade chains had a problem providing adequate quantities of the mentioned goods.

The companies in the manufacturing sector also felt consequences, although to a lesser extent. On the one hand, production suffered because manufacturers could not import raw materials. On the

other hand, sales suffered because they could not export finished products. Therefore, this crisis revealed the downsides of too extensive production process decentralization. The assembly of one final product sometimes requires components whose production is dislocated in different geographical locations. Interruptions or disturbances in supply chains have resulted in production continuity being disrupted. In the case of this crisis, dependence on logistics has proven to be a fundamental problem for the manufacturing sector.

1. LITERATURE REVIEW

The reactions of world governments were aimed primarily at preventing the virus spread and protecting the health sector. The group of authors dealt with evaluating the effectiveness of public policy measures against the COVID-19 virus. As the main preventive measures, the authors identified the use of masks, social distancing, hygiene, avoiding crowds and closed spaces, contact tracing, rapid and accurate testing, increased indoor air quality, vaccination and quarantine measures (Guner, Hasanoglu and Aktas 2021). The authors did not conduct empirical research, but reviewed the works of other authors and reached a conclusion about the importance of the mentioned measures. They particularly emphasized the role of institutions and governments aiding countries with limited resources. Some authors have ranked the measures according to their effectiveness, pointing out that the use of masks was the most useful in the fight against the pandemic, followed by the banning gatherings measure (Agyapon-Ntra and McSharry 2023). *Margaf, Brailovskaia and Schneider* conducted an online survey in eight countries (France, Germany, Poland, Russia, Spain, Sweden, United Kingdom, USA), which included 7,658 participants. The research aimed to examine the level of compliance and usefulness of the government's measures taken against the COVID-19 virus. The results indicated adherence was lowest in Russia and Poland, where people felt left behind and under-supported, and in the USA and Sweden, where governments showed ambivalence towards the measures.

Considering that the operations of certain companies were blocked and that a considerable number of people lost their jobs, it turned out that state intervention was necessary in the economic sector as well. Governments began to pass relief measures aimed at flaring economic recovery by preserving jobs and boosting spending. The measures reflected in tax breaks for companies, tax payments postponement, loan guarantees, financial support to the economy, expenditures for health care coverage, interest subsidies, etc. Faced with the crisis, companies resorted to different measures or combinations to prevail on the market. In addition to state aid measures, companies independently undertook activities to overcome the crisis. A large part of those measures came down to the introduction or expansion of business digitization.

Multiple authors studied the influence of the COVID-19 measures in the economic sector. A group of authors surveyed 518 Chinese small and medium-sized enterprises (SMEs) which revealed that digitization was an essential measure that enabled these enterprises to respond effectively to the crisis (Guo et al 2020). Research conducted among Russian small and medium-sized enterprises indicated the importance of the comprehensiveness of the measures, i.e. a combination of tax, administrative, banking and financial support to small and medium enterprises to level the negative impact. According to those authors, state funding can help restore small and medium-sized enterprises' business activities, but its volume should increase by 1.89–1.98 times (Razumovskaia et al 2020). Additionally, the authors pointed out that the vulnerability of the SME sector is not only limited resources but also a relatively low level of innovation potential. They pointed out that government support for the SME sector in Russia should be aimed at increasing and maintaining the innovative activities of enterprises. The importance of innovation was also pointed out by *Adam and Alarifi*, who surveyed 259 randomly selected managers of small and medium-sized enterprises in Saudi Arabia. The results of their research indicated that innovation practices adopted by small and medium-sized enterprises to face the consequences of COVID-19 have a positive impact on the performance and probability of business survival (Adam and Alarifi 2021).

Considering the uniform results of other authors regarding the importance of innovative activities of companies in times of crisis, this paper aims to analyse whether the same conclusion can be drawn among Bosnian companies. In this regard, there are two research questions:

1. *What response measures to the COVID-19 crisis did companies from Bosnia and Herzegovina use?*

The purpose of the first research question is to determine which response measures to the crisis caused by the COVID-19 virus were introduced by companies from Bosnia and Herzegovina and whether these measures are defensive or innovative.

2. Which response measures to the COVID-19 crisis were the most useful for companies?

The second research question seeks to examine the usefulness of measures implemented by businesses to protect themselves from the COVID-19 crisis. It will determine whether the support measures of the governments of both entities or independent measures were more important for companies from Bosnia and Herzegovina.

2. MACROECONOMIC AND MICROECONOMIC CONSEQUENCES OF THE COVID-19 CRISIS

The extensive decline in economic activity during the COVID-19 crisis reflected in the value of the gross domestic product drop. Already in the first half of 2020, the pandemic caused considerable losses. The total value of GDP decline in 2020 at the global level was 3.4% (Dyvik 2024). Loss values were uneven in different economies due to their diverse structures and strategies to fight the pandemic (European Court of Auditors 2020, 4). Economies dominated by service activities, especially tourism, suffered the most severe consequences.

The US Federal Reserve System (FED) and world central banks began implementing expansionary monetary policy to stem the decline in economic activity and stimulate consumption. It led to the inflation in 2021. Since unacceptably high inflation proved more persistent than analysts anticipated, the Fed began to tighten monetary policy at the end of 2021. Along with the tightening of monetary policy, real GDP started to grow. Recovery from the COVID-19 crisis was faster than in previous crises, such as the 2008 Global Financial Crisis. It was due to the fiscal policy measures, thanks to which the COVID-19 recession was shorter than the Global Financial Crisis, even though it initially had a more resonant decline.

Nonetheless, without the COVID-19 crisis consequences having been settled, a new crisis caused by the war between Russia and Ukraine emerged. It was primarily reflected in the energy and food sectors, which caused the additional pressure on prices. The uncertainty regarding energy supply and the interruption of gas deliveries by Russia to several EU member states caused prices to increase. On the other hand, the attack on Ukraine caused a problem related to the production and export of food, considering that Ukraine is a pivotal producer and exporter of wheat and corn. Most of its exports go to Asian and African countries. Aggravated production in the war-torn country and the Russian blockade of Ukrainian ports seriously threatened that export and led to inflation.

When it comes to the influences of the crisis on companies, World Bank data collected from over 100,000 companies around the world show that the impact of the COVID-19 pandemic manifested itself in the following way (World Bank Group and Center for Advanced Economic Studies 2020):

- the crisis harmed revenues and sales in all companies;
- employees went on forced leave or were fired;
- smaller firms faced more significant financial constraints;
- businesses started to rely more on digital solutions in response to the shock.

The negative impact of the crisis manifested itself primarily in the form of a sharp drop in sales and a decrease in employment, but generally with increased harmful financial effects on small businesses (Paunović and Aničić 2021, 170). A group of authors investigated the relationship between the crisis caused by the pandemic and inequality and detected a two-way relationship between the mentioned variables (Hunt, Zhang and Zhang, 2023). The authors noted that sensitive categories were particularly affected by the crisis. Since the poor groups have only one source of income, it is not surprising that they are more vulnerable. On the other hand, rich people have alternative income sources, thus diversifying the risk and being able to profit even in quarantine. The role of the state and its social benefits intended for consumption become significant for impoverished groups. It has been shown that the same analogy applies to business entities, i.e. that the COVID-19 crisis hit micro and small businesses harder as a more vulnerable category compared to medium and large enterprises.

3. CONSEQUENCES OF THE COVID-19 CRISIS IN BOSNIA AND HERZEGOVINA COMPANIES

The COVID-19 crisis caused a decrease in consumption and investments in BiH as well. The decline in GDP in BiH in 2020 amounted to 4.3% (OECD iLibrary). The survey conducted among companies in BiH as of April 11, 2020, revealed that around 71.5% of those surveyed stated that the crisis harmed their business at that moment, and 11% had to sign off their employees. As many as 63% of companies had to postpone payment of obligations to the state and 16.4% switched to alternative ways of doing business to prevail (World Bank Group 2020, 6). The most significant percentage of companies (71.2%) stated that the most severe challenge they faced was the drop in demand and that factors on the supply side were not as severe. Among those surveyed, as many as 72.4% of micro-enterprises declared that the impact of the pandemic on them was rather negative, while 67.5% of small and 57.1% of medium-sized enterprises did so. Hence, micro-enterprises in Bosnia and Herzegovina dealt with the consequences of the crisis the hardest.

Nonetheless, if the classification of companies by size is overlooked, it can be engaging to analyse how the crisis affected the market leaders, i.e. companies with the highest revenues. To study this, the value of realized revenues in leading Bosnian companies before and after the crisis was compared. The top 50 companies with the highest revenue are leading companies. The same comparison was made for the leading companies in the region - Slovenia, Croatia, Serbia and Montenegro. In each country, 50 companies with the highest realized revenue were observed, in the year before and following the crisis. The *Poslovne novine* magazine's database was used for comparison. The revenue value is given in euros and the results are in Table 1.

Table 1: Revenue of leading companies in the countries of the region before and after the crisis

| | 2019 | 2022 | Increase rate |
|-------------------------------|-----------------------|----------------------|---------------|
| Slovenia | 26.894.866.145 | 41.020.447.062 | 52% |
| Croatia | 22.803.846.609 | 35.615.536.424 | 56% |
| Serbia | 20.096.479.363 (2018) | 31.854.183.314 | 58% |
| Bosnia and Herzegovina | 9.011.441.054 | 13.009.413.768 | 44% |
| Montenegro | 3.300.306.002 | 3.350.768.709 (2021) | 1% |

* Note: monetary values in the table are converted into euros.

Source: author's calculation based on *Poslovne novine* data.

By comparing the revenue before and after the crisis, we conclude that the top 50 companies in each observed country achieved higher income after the pandemic than before. The most profitable companies in Slovenia achieved 52% more revenue after the crisis, in Croatia 56%, in Serbia 58%, in Bosnia and Herzegovina 44%, while the percentage in Montenegro is the smallest and amounts to only 1%. Although one should not ignore the fact that rising inflation contributed to the increase in income, the analysis conducted is one of the indicators that the market leaders in Bosnia and Herzegovina and other surrounding countries have more easily faced the consequences of the crisis. Most of these companies have maintained their leadership positions for years, which is an additional indicator of their stability. Moreover, the same 38 companies in Bosnia and Herzegovina are among the leaders before and after the crisis. If we observe the top ten companies in Bosnia and Herzegovina, seven retained their leading positions after the crisis. The company Gen-i Ltd. recorded the highest revenue growth. Sarajevo achieved 3.6 times higher revenues in 2022 than in 2019, thus jumping from 33rd place to 10th place. Following it is Optima Group Ltd. Banja Luka, achieving the most prominent growth by 82% (*Poslovne novine* no. 1293 and *Poslovne novine* no. 1286). Leading BiH companies operate in retail trade in non-specialized stores, production and trade of electricity, production and trade of oil products, iron production and aluminium production.

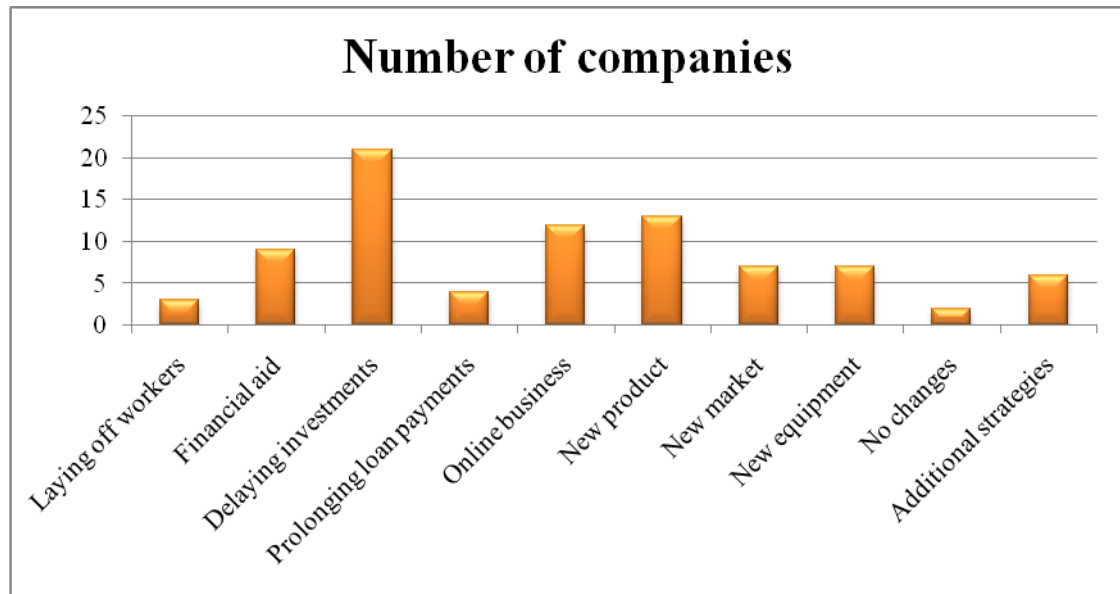
4. RESPONSE MEASURES TO THE COVID-19 CRISIS IN BOSNIA AND HERZEGOVINA COMPANIES

Measures taken by the Bosnia and Herzegovina authorities to aid the population and business entities during the crisis included net salaries and contributions coverage, price control, vouchers for accommodation in domestic tourist facilities, facilitating loan repayment, preferential treatment of domestic companies in public procurement, etc. This paper focuses on measures sustaining companies, so a survey questionnaire was created to examine which measures were most often employed by domestic business entities and which benefited them the most. The survey was conducted in July 2023 under the assumption that companies had enough time after restriction lifting to assess the effectiveness of the implemented measures. The electronic survey questionnaire was forwarded to the e-mails of 120 randomly selected companies. It was ensured that the structure of the selected companies in the sample corresponds to the distribution across the territorial units of BiH. The sample also represents company structure by size (micro, small, medium and large companies) and activity (manufacturing and service companies). Of the total number of sent questionnaires, 50 were completely filled out and used for further analysis.

Barely more than two-thirds of the surveyed companies (68%) are located in the Federation of Bosnia and Herzegovina, less than a third (28%) in the Republic of Srpska and 4% in the Brčko District. Among the surveyed companies, the majority are small companies (92%, of which 75% are micro-enterprises), then medium-sized (6%), and the large ones (2%). Companies engaged in service activities (80%) dominate the sample structure. Therefore, considering the sample representativeness regarding the territorial distribution of companies, their size and structure, the results can be acceptable for the whole of Bosnia and Herzegovina.

The companies were first to indicate what types of strategies they applied during the crisis. It was a semi-open question, and the companies could indicate one or more options they decided on to mitigate the consequences of the pandemic. Among the answers offered, companies could choose the following strategies: laying off workers, using financial aid at the local/regional/entity and/or state level, delaying investments, prolonging loan payments, switching to an online way of doing business, introducing a new product, entering a new market, installing new equipment, additional strategies and there were no changes. Under additional company strategies, they listed salary reduction, cost reduction, work organization change, improvement of hygiene measures, investment in facility renovation and employment of an external manager. Graph 1 displays that most companies specify they used the delaying investments strategy (21 companies, i.e. 42%), and the smallest number that they did not take any measures to protect against the crisis (2 companies, i.e. 4%). The strategy of postponing investments is in line with the need of companies to minimize risk and invest money when the environment is stable and business conditions are less uncertain. However, among those who took risks and introduced innovations during the pandemic, most switched to an online way of doing business or introduced new products. Bearing in mind the isolation precautions during the pandemic and the suggestion that as many jobs as possible be done from home, the online way of doing business as a strategy was the expected response of the surveyed companies. The offer of new products is no less expected since, during the pandemic, companies designed various seminars and courses, online forms of entertainment, etc. The analysis of the results indicated that an equal number of companies used defensive strategies (laying off workers, using financial aid, postponing investments, prolonging loan payments...) and innovative strategies (switching to an online business, introducing a new product, entering a new market, installing new equipment...).

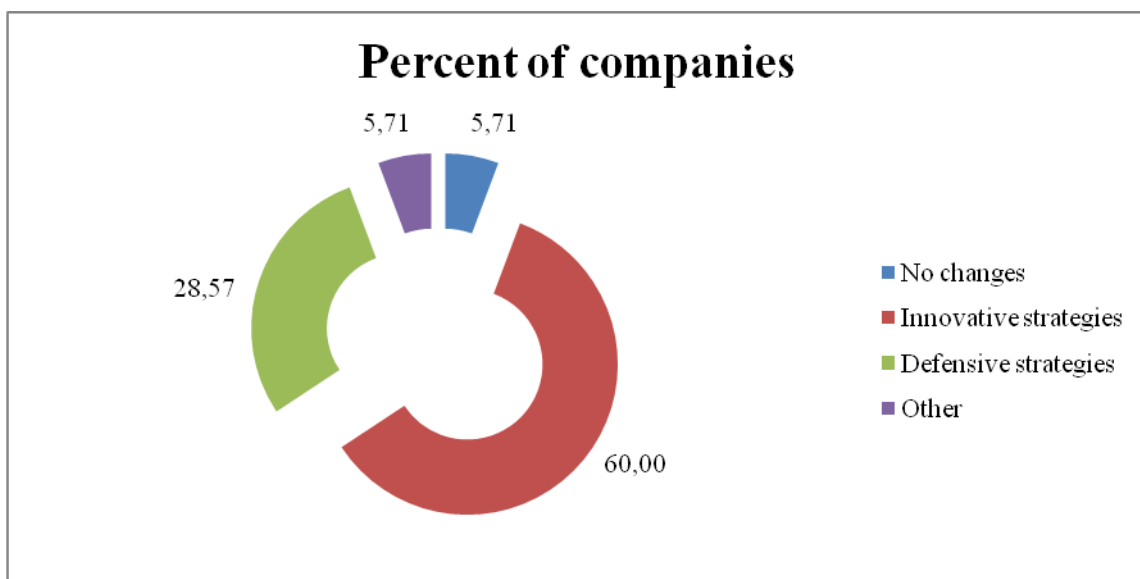
Graph 1: Response strategies to the COVID-19 crisis in Bosnia and Herzegovina enterprises



Source: author's calculation

Although defensive and innovative strategies were used to the same extent, companies are not equally satisfied with their results. When asked which implemented strategies contributed the most to business, the most extensive percentage of companies (60%) pointed out that these were innovative strategies (Graph 2).

Graph 2: The effectiveness of strategies to protect against the COVID-19 crisis



Source: author's calculation

The obtained results are in line with the research of other authors, who demonstrated that the innovation practices adopted by small and medium-sized enterprises to face the consequences of the crisis caused by the COVID-19 virus had a positive impact on the performance and the probability of business survival (Adam and Alarifi 2021).

5. RESULTS DISCUSSION

The analysis of the BiH market leaders confirmed that they did not suffer significant consequences during the crisis. The revenues of the leading companies grew, and the structure did not change to a greater extent before and after the pandemic. Nevertheless, it should not be overlooked that some leading companies have built their positions and have maintained them for years due to their associations with the political elite. Another reason for the success of particular market leaders is their monopoly position on the market and/or depletion of natural resources. Finally, some of the top companies are related legal entities, and there is scepticism that they apply transfer prices to impact the level of the financial result, thereby influencing the level of profit tax. In such companies, the values of realized profits are overly low compared to multimillion-dollar revenues, and they happen to have a rather small number of employees. Other business entities usually do not have such privileges and are often left on their own, i.e. depending on the capabilities and knowledge of their founders and/or managers. A similar situation prevails in the surrounding countries.

The central part of this paper focuses on the measures implemented by Bosnian and Herzegovinian companies to overcome the consequences of the pandemic crisis. The survey indicated that most companies (96%) employed at least one crisis response measure, of which an equal number applied defensive and innovative strategies. One of the innovative strategies is business digitization. It influenced the way of working, which created a potential source of new competitive advantages for companies. Digitization can improve a company's operational efficiency by automating decision-making, improving the efficiency of business processes and saving costs. Some of the benefits of digitization include using social media to promote products and perform tasks online. Additionally, digitization enables the creation of digital innovations – new products, services, business models and organizational forms. Digital innovations enabled a high level of innovation in companies in Bosnia and Herzegovina and proved to be the most beneficial response measure to the COVID-19 crisis. It confirmed the importance of following modern business information solutions (either through networking with other entrepreneurs or consultations and training).

Although innovative strategies have proven to be more valuable for companies, the importance of fiscal policy measures should not be overlooked. These measures allow companies that are on the edge of existence to prevail. Previous crises, such as the 2008 Global Financial Crisis, have shown that the market's invisible hand is still an insufficient regulation mechanism and that state intervention is necessary in crisis periods.

CONCLUSION

The COVID-19 virus-induced crisis has affected the population and the economy, changing the way of life and business interactions. The movement of people and goods was limited, which disrupted the production process, logistics and trade flows. The crisis caused serious but short-term consequences at the micro and macro levels. The long-term issue after the crisis is high inflation, further exacerbated by the war in Ukraine. The crisis left more severe consequences on service and micro and small businesses. Regardless, recovery was rapid thanks to the support measures of the authorities.

The impact of the crisis on Bosnian companies was similar to that in the rest of the world. The market leaders persevered through the predicament without significant consequences due to their privileged position. The rest of the economy faced more powerful turbulence and had to use state aid measures or struggle in other ways. By comparing the works of different authors and the research carried out in this paper, we conclude that the COVID-19 pandemic showed exceptional importance and the need for innovative development. Companies that actively introduced various digital technologies and solutions met the crisis more smoothly. Although the surveyed companies stated that they used defensive and innovative strategies equally, it turned out that they benefited more from innovative ones. The most important outcome of the crisis is the reorientation of companies towards digital business and the realization that it can become a new source of competitive advantages.

REFERENCE

- Adam, Nawal Abdalla, and Alarifi, Ghadah. 2021. "Innovation practices for survival of small and medium enterprises (SMEs) in the COVID-19 times: the role of external support". *Journal of Innovation and Entrepreneurship* 10(1). <https://doi.org/10.1186/s13731-021-00156-6>.
- Agyapon-Ntra, Kwadwo, and McSharry, Patrick. 2023. "A global analysis of the effectiveness of policy responses to COVID-19". *Scientific Reports* 13: 5629. <https://doi.org/10.1038/s41598-023-31709-2>.
- Aničić, Zorica, and Paunović, Blagoje. 2022. "The Covid-19 crisis and small and medium-sized enterprises (SMEs) in Serbia: responsive strategies and significance of the government measures". *Journal of East European Management Studies* 27(3): 404-433.
- Bartik, Alexander, Bertrand, Marianne, Cullen, Zoe, Glaeser, Edward, Luca, Michael, and Stanton, Christopher. 2020. "How are small businesses adjusting to covid-19? Early evidence from a survey (Working Paper 26989)". National Bureau of Economic Research. Accessed April 15, 2024. https://www.nber.org/system/files/working_papers/w26989/w26989.pdf
- Dyvik, Einar. 2024. „Impact of the coronavirus pandemic on the global economy – Statistics and Facts“. *Statista*, January 10, 2024. <https://www.statista.com/topics/6139/covid-19-impact-on-the-global-economy/#topicOverview>
- Europski revizorski sud. 2020. „Rizici, izazovi i prilike u odgovoru EU-a u okviru gospodarske politike na krizu uzrokovanu bolešću COVID-19. Pregled br. 06“. Accessed May 1, 2024. https://www.eca.europa.eu/lists/ecadocuments/rw20_06/rw_economic_response_to_covid19_hr.pdf
- Guner, Rahmet, Hasanoglu, Imran, and Aktas, Firdevs. 2021. „Evaluating the efficiency of public policy measures against COVID-19“. *Turkish Journal of Medical Sciences* 51(7): 3229-3237.
- Guo, Hai, Yang, Zhuen, Huang, Ran, and Guo, Anqi. 2020. "The digitalization and public crisis responses of small and medium enterprises: Implications from a COVID-19 survey". *Frontiers of Business Research in China* 14(1).
- Hunt, Lester, Zhang, Anqi, and Zhang, Shuonan. 2023. „Recession and recovery from the pandemic“. *Research in Globalization*, Vol. 6. <https://doi.org/10.1016/j.resglo.2023.100117>.
- Margaf, Jurgen, Brailovskaia, Julia, and Schneider, Silvia. 2020. „Behavioral measures to fight COVID-19: An 8-country study of perceived usefulness, adherence and their predictors“. *PLOS ONE* 15(12): e0243523.
- OECD iLibrary. „Impact of COVID-19 in Bosnia and Herzegovina“. Accessed May 1, 2024. <https://www.oecd-ilibrary.org/sites/f0011603-en/index.html?itemId=/content/component/f0011603-en>
- Paunović, Blagoje and Aničić, Zorica. 2021. „Impact of the COVID-19 crisis on SMEs and possible innovation responses“. *Ekonomika preduzeća* 69(3-4): 169-184.
- Poslovne novine. 2019. „100 najvećih u Bosni i Hercegovini 2019“. September, br. 1283.
- Poslovne novine. 2020. „100 najvećih u Bosni i Hercegovini 2020“. September, br. 1286.
- Poslovne novine. 2022. „100 najvećih u Bosni i Hercegovini 2022“. September, br. 1292.
- Poslovne novine. 2023. „100 najvećih u Bosni i Hercegovini 2023“. September, br. 1293
- Razumovskaia, Elena, Yuzvovich, Larisa, Kniazeva, Elena, Klimenko, Mikhail, and Shelyakin, Valeriy. 2020. „The effectiveness of Russian government policy to support SMEs in the COVID-19 pandemic“. *Journal of Open Innovation: Technology, Market and Complexity* 6(4). <https://doi.org/10.3390/joitmc6040160>.
- World Bank Group and Center for Advanced Economic Studies. 2020. "The COVID-crisis and Serbia's SMEs: Assessment of impact and outline of future scenarios". CEVES. Accessed September 15, 2023. https://ceves.org.rs/wp-content/uploads/2020/11/WB-Covid19_Report-final.pdf
- World Bank Group. 2020. „Zapadni Balkan, redovni ekonomski izvještaj br. 17. Ekonomski i socijalni uticaj COVID-19“. Accessed May 2, 2024. <https://thedocs.worldbank.org/en/doc/168321591340102093-0080022020/original/WBRER1712PrivateSectorBOS.pdf>

