

Slobodan Adžić

University Union – Nikola Tesla
Faculty of Management FAM
Serbia

Marijana Milunović

University Union – Nikola Tesla
Faculty of Management FAM
Serbia

Adrijana Vuković

University Union – Nikola Tesla
Faculty of Law, Security and Management
"Constantin the Great"
Serbia

Nenad Marković

University Union – Nikola Tesla
Faculty of Management FAM
Serbia

DETERMINING THE IMPACT OF COVID-19 PANDEMIC ON THE FINANCIAL SYSTEM OF SERBIA

Utvrđivanje uticaja pandemije kovid-19 na finansijski sistem Srbije

Abstract

The coronavirus disease has induced financial stress by destabilizing national economies, financial capital markets, financial management, financial markets, and commodity prices. The aim of the authors is to determine the impact of COVID-19 on the financial system of Serbia. For the purposes of this exploratory study, the authors developed a research scale "Impact of COVID-19 on Financial System" and conducted a quantitative survey () to understand and explain the problems and perspectives of the finance industry during the outbreak of the COVID-19 pandemic. The overall result of the success of the measures taken during the pandemic leads us to the conclusion that the financial sector in Serbia managed to survive during the pandemic with great efforts. The financial industry preserved its position mainly due to the successful digitalization and online banking transition. The authors concluded that the financial system in Serbia was efficient and sustainable during the COVID-19 pandemic and that the Serbian financial system could maintain its strong position even after the end of the COVID-19 pandemic.

Keywords: COVID-19, financial system, finance industry, digitalization, Serbia.

Sažetak

Bolest uslovljena koronavirusom izazvala je finansijski stres destabilizacijom nacionalnih ekonomija, tržišta kapitala, finansijskog upravljanja, finansijskih tržišta i cena proizvoda. Cilj autora je utvrđivanje uticaja kovid-19 na finansijski sistem Srbije. Za potrebe ove eksploratorne studije, autori su razvili istraživačku skalu „Uticaj kovid-19 na finansijski sistem“ i sproveli kvantitativno istraživanje (N = 51) kako bi razumeli i objasnili probleme i izgled finansijske industrije tokom kovid-19 pandemije. Sveukupan rezultat uspeha mera preduzetih tokom pandemije navodi nas na zaključak da je finansijski sektor u Srbiji uz velike napore uspeo da preživi pandemiju. Finansijska industrija sačuvala je svoju poziciju uglavnom zahvaljujući uspešnoj digitalizaciji i prelasku na onlajn bankarstvo. Autori zaključuju da je finansijski sistem u Srbiji bio efikasan i održiv tokom pandemije kovid-19 i da bi finansijski sistem Srbije mogao da zadrži svoju snažnu poziciju i nakon okončanja pandemije kovid-19.

Ključne reči: kovid-19, finansijski sistem, finansijska industrija, digitalizacija, Srbija.

Introduction

The epidemic caused by the SARS-CoV-2 virus and COVID-19 disease has created an unprecedented crisis that has not been seen in the last hundred years. The SARS-CoV-2 coronavirus has contributed to the most important transition in the world order, destabilizing the global and national economies. Inevitably, some sectors would be more impacted by COVID-19 than others. This paper intends to examine the impact of COVID-19 on the financial sector and to determine its current and future sustainability, especially given the lessons the financial sector needed to learn after the year 2008 crisis.

How did central banks of developed and less developed economies respond to the COVID-19 pandemic, what was the role of the financial institutions in the economic policy, how did the stock exchanges react, and what was the primary concern of finance managers regarding the cash holding level? These are some topics covered in the literature review along with a description of the policy-mix approach of the Government of Serbia and the Central Bank of Serbia policies to mitigate the effects of the COVID-19 on the economy. In the methodology section, we described the aims of this research, the applied methods, and the sample. In the results section, we performed the statistical reliability tests of the scale we created called “Impact of COVID-19 on Financial System”, following by the results of our survey in order to draw conclusions. The findings of this study show that the sustainability of Serbia’s financial system was not threatened during the COVID-19 pandemic.

Finance Industry Issues Caused by the COVID-19 Pandemic

Having a better-equipped health system and more competent institutions are not enough to cope with the transmission of viruses such as COVID-19 in a country. The mechanism of response to the virus outbreak was more critical than the country’s systemic preparedness [23]. Government initiatives were the most important ones. Even in the initial process of the COVID-19 epidemic, less-developed nations did better. However, healthcare interventions are

confined to general preventive measures in the absence of medicine and enough vaccines. Primary measures include [19] the restriction of movement, the quarantine of exposed persons, the minimization of social interaction, sanitation and personal hygiene measures, and the proper use of personal protection equipment. Moreover, the country’s readiness in the health system was crucial for the survival of a nation, but the readiness in the business and financial system was of the importance of the survival and sustainability of the social system, as well.

The SARS-CoV-2 coronavirus has contributed to the most important transition in the world order, destabilizing, among others, the global economy and the financial capital markets, the national economy, social stability, industry, risk management, financial management, and financial markets. COVID-19 has created great volatility and drastically affected travel, tourism, supply chains, hospitality, consumption, production, operations, valuations, security, financial stress, and the prices of all products, including fossil fuel and renewable energy sources [6]. Markets have not reacted well to natural disasters and terrorist acts. Therefore, the COVID-19 crisis warns investors, decision-makers, and the population at large that economic harm can be caused by present health disasters on a scale previously unparalleled [10]. Inevitably, some sectors would be more impacted by COVID-19 than others. Yet COVID-19 would also have an immense effect on domestic consumption in virtually every country. A theoretical model [15] that illustrates that as the prevalence of major pandemics rises, the risk of a collapse of the banking sector of a developed country increases, pointed out that as the pandemic increases, the optimal bank reserves increase.

In advanced economies, central banks responded rapidly and aggressively to the COVID-19 pandemic, implementing within weeks the full spectrum of crisis instruments. The primary aim of the initial response was to relieve financial stress and ensure a smooth flow of credit to the private sector [5]. The condition in less developed countries was much worse because of poor economies and the reduction of central banks’ power [24]. Under the COVID-19 crisis, central banks are starting to lose their institutional and financial freedom, and monetary

issues in the real economy are likely to be decided not by the market, but primarily by the needs of the sovereign government. Those measures could provoke a global economic crisis [3]. The central bank's stabilization loans are the most critical tool of the state that makes it possible to save banks and all other sectors of the economy from bankruptcy [24]. However, central banks' trend of aggressively reducing interest rates much more than a prior record low has placed additional pressure on banks' interest margins [12].

Financial markets have had a major role in the economic policy during the pandemic. Monetary policy measures have focused on quantitative easing, with large injections of capital into the financial sector and even into the corporate sector [29]. The greatest rise in liquidity demands ever witnessed was experienced by American banks in March 2020. Lending has risen by more than 50 times the average over the last three weeks of March [17]. After the Lehman bankruptcy, companies drew heavily on bank credit lines too, with lending rising by 10 times the average. In stark contrast to what occurred during the 2008 recession, anxiety over liquidity placed no pressure on banks. With the huge growth in deposits, which increased by around \$1 trillion overall during the crisis weeks, twice as much as the net rise in lending, these banks were able to finance the liquidity demands. The lion's share of these liquidity demands has been faced by large banks. A similar situation was in Poland too, where the largest banks were the most resilient during the current health crisis [14]. However, Germany witnessed quite opposite practice. In contrast to the large banks, Germany's regional banks, i.e. 379 public savings banks and 842 cooperative banks, extended lending, as they did in the 2008 crisis [9].

The COVID-19 pandemic has a major effect on the cash holding level of companies in sectors severely affected by the pandemic as the managers of affected companies increase the cash holding level to protect companies from contingencies [25]. The pandemic outbreak reduces the financial effectiveness of microfinance institutions; however, it increases the social effectiveness of microfinance institutions [30]. Equity investments in start-ups and small medium-sized businesses slumped sharply, resulting in a

60% drop in the overall investment volume [4]. Although debt markets are heavily affected by the global financial crisis, entrepreneurial financing is much more vulnerable to the massive disruption caused by the Covid-19 crisis. By its very nature, the insurance sector is inherently well suited to cope with big industry loss incidents, such as the COVID-19 pandemic [12].

World financial markets have suffered significant losses as a result of the shocks triggered by the COVID-19 pandemic. On the 20th of February, financial prices began to decline, with a concurrent decline in all global markets. In the four weeks that followed, financial prices lost between a third and 40 percent of their value, falling more quickly than in 1929 [29]. For instance, in what is called the March 9 Black Monday incident, stock markets such as the Dow Jones lost approximately 3000 points in one day, while the FTSE collapsed by around 5 percent and saw a staggering loss of US\$ 90 billion in one day [20]. The stocks began to rise again around March 23rd, but meanwhile, on March 8th, the price of oil plummeted by 24% [29]. Multiple manufacturers have ceased manufacturing gold due to the coronavirus pandemic, which has led to a lack of gold. It is almost impossible to purchase a gold ducat or gold bar in Europe [28]. The rise in the price of gold was subsequently influenced by the spike in demand. The pandemic caused a flight to liquidity or a "dash for cash". This took the form of a flight to US\$ on currency markets. In comparison to the US\$, all currencies have lost value. GBP traded at US\$1.15 on 20 March 2020, its lowest value since 1985 [29].

A policy-mix strategy is required during times of crises. To mitigate the economic consequences of the COVID-19, the Ministry of Finance and the National (Central) Bank of Serbia have implemented a number of fiscal and monetary expansion measures in their respective jurisdictions, totaling RSD 608.3 billion or € 5.2 billion [27]. The Program of Economic Measures for Reducing the Negative Effects of the Covid-19 Pandemic and Supporting the Serbian Economy was launched by the Ministry of Finance. Tax policy changes, direct support to SMEs with the three monthly minimum salaries, efforts to preserve liquidity for the private sector through favorable loans from the Development Fund, and a direct

distribution of € 100 to every adult residents are all part of the program [18]. Domestic and international commercial and multilateral loans from financial institutions and foreign governments, as well as the issue of government securities and Eurobonds, will be used to support pandemic economic measures. To stimulate credit and economic growth, the National Bank of Serbia decreased the key policy rate twice, concluding with the key policy rate at 1.50 percent, the deposit facility rate at 0.50 percent, and the lending facility rate at 2.50 percent [27]. Additional dinar and foreign currency liquidity was provided to the local banking system. Excess liquidity is at an all-time high. Finally, the Central Bank decides to impose a debt payment moratorium of at least 90 days. Fees would be prohibited for banks and lessors. More than 90 percent of debtors (businesses, entrepreneurs, individuals, and other entities) took advantage of the moratorium [28].

According to one study [2], the incentive measures of the Government of Serbia and the Central Bank of Serbia during pandemic have been almost completely annulled by the threats caused by the Covid-19 pandemic. According to another study [22], the overall impact of COVID-19 on the business operations of SMEs is perceived as negative, with the most negative impact associated with market operations of product/service firms, the less negative impact recorded in the segments of logistics and business activities organization, and the least negative impact recorded in the segment of financial organization. After the present epidemic ends, predicting Serbia's economic future will be extremely difficult. There will almost undoubtedly be a slowdown in economic growth, as well as a probable increase in unemployment, supply chain disruptions, and a loss in purchasing power [18]. The focus of operations should be redirected to establishing a favorable environment for domestic entrepreneurship and private investment growth [13]. To create value rather than redistribute it, investments should focus on the circular and regenerative economy, health care, infrastructure (physical and conceptual), science, and education [8].

An unforeseen disruption to global business has been generated by the COVID-19 pandemic, but crises also force change. Almost all staff of financial services firms have operated remotely from their homes since

lock-downs started [12]. The application of new financial technologies will likely accelerate [29]. IT technology modernization is critical to surviving and competing in current economy [26]. Thus, the present role of finance and accounting can be digitalized nearly in its entirety [16]. Therefore, when we recover from COVID-19, one of the first activities for finance practitioners would be to scrutinize any manual activity that still requires physical human contact or manual processing and to consider automated alternatives. From the Covid-19 pandemic, all facets of the environmental, social, and governance movement should emerge stronger [7]. Changes in the way capital markets perceive social and environmental requirements and, more broadly, business behavior will pave the way for a more sustainable approach in the future.

Methodology

The aim of current research is twofold. The first aim is to develop a Likert-type research scale that can be used to analyze the impact of COVID-19 on the sustainability of financial systems. Based on the available literature on the topics of the finance industry issues during the pandemic, we adapted the "Impact of COVID-19 on Business" scale [1] and developed a research scale "Impact of COVID-19 on Financial System". The second aim is to develop a quantitative survey and to collect data from Serbia about the impact of COVID-19 on the sustainability of the financial system and the problems and perspectives of the finance industry players during and after the COVID-19 pandemic. In addition to the Likert-scale questionnaire, we asked the participants to evaluate the measures of the Central Bank of Serbia and the Government of Serbia, to single out the most efficient bank during pandemics, as well as to give their opinion on which banks were more efficient in this period, large or small.

The quantitative research was conducted in the form of a survey in the period from mid-December 2020 to mid-February 2021. The questionnaire in the Serbian language was posted online on the Google Forms platform. We adopted a snowball sampling technique, with the help of social media and personal contacts. The final number of qualified participants and valid responses consisted of

those who have worked in the financial sector during the pandemic and of those who have known about the impact of the pandemic on the financial sector was 51 (N=51). We planned a considerably larger sample, but we did not count on the clause of the communication restriction with the external public built into the financial institutions' employment contracts. This limiting circumstance contributed to a smaller number of questionnaires and a longer survey time. More than 60% or 32 participants were located in the capital of Serbia, Belgrade. A tight majority or 51% held managerial positions; ⅔ were females. Almost 60% of participants earned a bachelor's degree; almost two-thirds of them worked in large organizations. Finally, 18 participants, or 35% have worked in a bank, following with the 10 participants, or 20% who have worked in an insurance company. The rest of 45% or 23 participants have worked in various finance positions in the corporate sector.

Results

We modified the current scale "Impact of COVID-19 on Business" [1] based on the analysis of the topics raised in the literature section and formed the scale "Impact of COVID-19 on Financial System", which consists of 20 five-point Likert-type questions (Figure 1).

Our first task would be to apply statistical tests on the scale. Primary, we tested the internal consistency of our scale. The calculated Cronbach's Alpha coefficient in SPSS was 0.945. Therefore, we can conclude that the internal consistency of our scale "Impact of COVID-19 on Financial System" with twenty items is truly excellent since the values above 0.8 are preferable [21]. Secondly, we performed the Factor analysis. The scale was adequate for the analysis since the Kaiser-Meyer-Olkin measure of sampling adequacy was 0.846, above the recommended value of 0.6, and Bartlett's test of Sphericity was signifi-

Figure 1. Impact of COVID-19 on Financial System Scale

- 1 Our organization proved resilient during the pandemic
- 2 We did not experience any disturbances or problems during the pandemic
- 3 During the pandemic, our efficiency increased
- 4 During the pandemic, our profitability increased
- 5 The level of digitalization in our organization is really satisfactory
- 6 We had no liquidity problems during the pandemic
- 7 Our level of capital was satisfactory during the pandemic
- 8 During the pandemic, we had no problems with credit activity
- 9 During the pandemic, the quality of our loans was satisfactory
- 10 Lowering the reference interest rate as a measure of the Central Bank's monetary policy during the pandemic helped our business
- 11 Providing additional dinar and foreign currency liquidity to the banking sector as a measure of the Central Bank's monetary policy during the pandemic helped our business
- 12 Moratorium in repayment of debtors' obligations as a measure of the Central Bank's monetary policy during the pandemic helped our business
- 13 Government measures during the pandemic helped our business
- 14 During the pandemic, our revenues increased
- 15 We innovated our business model during the pandemic
- 16 We successfully started new businesses during the pandemic
- 17 During the pandemic, our organization managed to achieve new forms of cooperation with other organizations
- 18 The leadership of our organization was effective during the pandemic
- 19 During the pandemic, we introduced the practice of working from home
- 20 There were no layoffs during the pandemic in our organization

Table 1. Pattern matrix

	Component	
	1	2
During the pandemic, our profitability increased	1,001	-0,313
We did not experience any disturbances or problems during the pandemic	0,939	-0,116
We successfully started new businesses during the pandemic	0,870	0,025
During the pandemic, our efficiency increased	0,863	-0,078
During the pandemic, we had no problems with credit activity	0,824	0,045
During the pandemic, the quality of our loans was satisfactory	0,818	-0,064
Our level of capital was satisfactory during the pandemic	0,767	0,189
We had no liquidity problems during the pandemic	0,729	0,057
Our organization proved resilient during the pandemic	0,686	0,204
We innovated our business model during the pandemic	0,651	0,249
During the pandemic, our organization managed to achieve new forms of cooperation with other organizations	0,610	0,308
During the pandemic, our revenues increased	0,577	0,110
There were no layoffs during the pandemic in our organization	0,483	0,177
The level of digitalization in our organization is really satisfactory	0,416	0,138
Moratorium in repayment of debtors' obligations as a measure of the Central Bank's monetary policy during the pandemic helped our business	-0,067	0,863
Providing additional dinar and foreign currency liquidity to the banking sector as a measure of the Central Bank's monetary policy during the pandemic helped our business	0,025	0,784
Lowering the reference interest rate as a measure of the Central Bank's monetary policy during the pandemic helped our business	0,008	0,784
Government measures during the pandemic helped our business	0,028	0,712
The leadership of our organization was effective during the pandemic	0,198	0,664
During the pandemic, we introduced the practice of working from home	0,220	0,416

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.^a
a. Rotation converged in 5 iterations.

Table 2. Results of the Likert scale in a descending order

	Mean	Std. Deviation
There were no layoffs during the pandemic in our organization	3,90	1,49
Our organization proved resilient during the pandemic	3,71	1,20
During the pandemic, we introduced the practice of working from home	3,69	1,46
The level of digitalization in our organization is really satisfactory	3,63	1,23
We had no liquidity problems during the pandemic	3,47	1,36
Our level of capital was satisfactory during the pandemic	3,43	1,37
The leadership of our organization was effective during the pandemic	3,37	1,25
During the pandemic, we had no problems with credit activity	3,33	1,34
<i>Grand Average</i>	3,09	0,88
During the pandemic, the quality of our loans was satisfactory	3,08	1,23
Lowering the reference interest rate as a measure of the Central Bank's monetary policy during the pandemic helped our business	3,02	1,09
Government measures during the pandemic helped our business	2,90	1,25
We did not experience any disturbances or problems during the pandemic	2,90	1,17
Providing additional dinar and foreign currency liquidity to the banking sector as a measure of the Central Bank's monetary policy during the pandemic helped our business	2,88	0,97
Moratorium in repayment of debtors' obligations as a measure of the Central Bank's monetary policy during the pandemic helped our business	2,86	1,15
We innovated our business model during the pandemic	2,84	1,24
We successfully started new businesses during the pandemic	2,78	1,21
During the pandemic, our organization managed to achieve new forms of cooperation with other organizations	2,69	1,29
During the pandemic, our efficiency increased	2,67	1,32
During the pandemic, our profitability increased	2,37	1,20
During the pandemic, our revenues increased	2,20	1,11

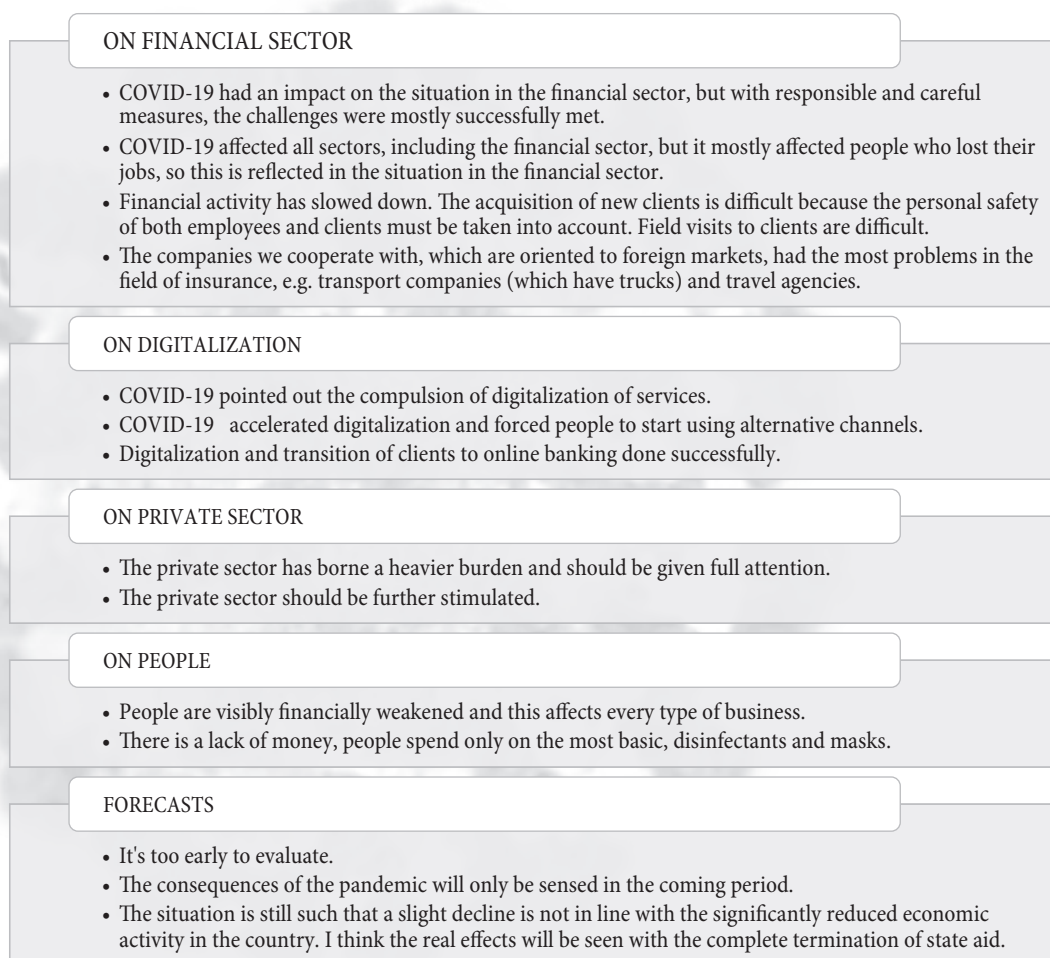
cant, since $p < .05$ [21]. The existence of four components with eigenvalues above 1, explaining a total of 73.8% of the variance, was discovered by Principal component analysis. Nevertheless, an elbow is shown by the steep curve of the Scree map between the second and third components. This criterion is far more appropriate than the eigenvalue criterion to obtain precise results [11]. As seen in Table 1, the rotated solution with the Oblimin rotation procedure yielded two interpretable components or factors. More than 60% of the variance was explained by the two-component solution, with component 1 contributing to 50.67% and component 2 contributing to 9.88% of the variance. A strong positive correlation between these two components ($p = .524$) was observed.

Finally, we present the most important research output, the Likert questionnaire scale results (Table 2). The grand average impact of COVID-19 on the financial

system, or the average mark of all participants on all questions, is rated at 3.09.

In addition to the Likert-scale questionnaire, people who took a part in our survey valued (marking from 1 to 10) measures of the Central Bank of Serbia at 5.82 and measures of the Government of Serbia at 5.31. A finding that larger banks were more efficient than small ones can be accepted as an indication, given that only one-third of respondents answered this question. Raiffeisen was voted as the best bank with 8 votes, followed by Banca Intesa with 7. A third place was shared by Erste Bank and “none” with 3 votes each. Other mentioned banks with a minimum number of voices were: Credit Agricole, OTP, Procredit, and Komercijalna banka with 2 votes each, followed by EFG, MTS, NBS, Unicredit, Sberbank, and Poštanska štedionica with 1 voice each. Finally, we present our respondents’ most insightful remarks (Figure 2).

Figure 2. Concluding remarks of the respondents



Discussion and Conclusion

Our respondents rated the central bank measures slightly higher than the government measures. However, although the score closer to 6 (5.82) is higher than the rounded 5 (5.31), it is obvious that the measures were not highly rated and that these measures did not improve the business of the financial sector during the COVID-19 pandemic, but only preserved it, which was probably the state intention from the beginning. The overall assessment of the success of all measures taken during the pandemic was 3.09, which is slightly above half. Such a result leads us to the conclusion that the financial sector, with great efforts, managed to achieve sustainability in this time of crisis. The measure rated with the highest score of 3.90 was the measure that was actually not implemented (Table 2). Namely, by not firing workers during the pandemic, financial organizations maintained a positive organizational climate and managed to achieve resiliency, which was rated at 3.71. Being resilient during a crisis was quite important. The assessments of the following two measures reveal to us how jobs have been preserved. These are working from home, which is rated at 3.69, and comprehensive digitalization, rated at 3.63. All the previously mentioned measures can be evaluated with a very good grade because all of them can be expressed with a grade that is close to 4. It could be seen that the financial sector had no problems with liquidity, nor with the level of capital or with lending activity, because all these measures were rated above average. We can conclude that Serbian financial institutions did not experience a recurrence of the crisis in 2008, just as Western banks did not experience it as well. Leadership in unstable times strives for excellence, which is shown by a rather satisfactory score of 3.37 obtained for the efficiency of leaders in the financial sector of Serbia during COVID-19. Grades below the average score, but higher than 3, are the grades regarding the quality of loans of financial institutions (3.08) and the central bank measures to lower the reference interest rate (3.02). The measures of the government of the Republic of Serbia received a score lower than 3, so we can conclude that the measures of the central bank corresponded more to the sustainability of the financial system during the pandemic than the government measures. Such results

are in line with the rates from our sample for government and bank measures. However, the following grade of 2.90 is evidence that the financial sector had problems and disturbances in its work during the pandemic. Other central bank measures were assessed as less successful. The measure of providing additional liquidity was rated at 2.88, and the moratorium in repayment of debtors' obligations was rated at 2.86. Based on low scores of 2.84, 2.78, and 2.69, respectively, it is obvious that financial institutions have not innovated their business model, nor started new businesses or achieved cooperation with other organizations. Finally, the lowest scores were achieved for increase in efficiency (2.67), increase in profitability (2.37), and increase in revenue (2.20) indicating that these increases did not occur at all.

Applying factor analysis, we generated a Pattern matrix (Table 1) consisting of two components or two factors. The first component consists of fourteen measures or impacts on the sustainability and the efficiency of the financial sector derived from the internal operations of financial organizations. Starting with the increased internal profitability, which fully correlates with business success at the time of coronavirus, and ending with the level of digitalization with a correlation of 0.416, these fourteen items form a set that can be used in an unchanged form in the future research of the impact of COVID-19 on the financial system. This set can be named as a set of internal operational measures at the time of the pandemic. The next component of six items contains external measures or impacts on the sustainability and efficiency of the financial sector, as this set contains government measures and central bank measures. This set of external measures for potential future research should be amended per specific measures in the observed financial market. It is interesting that in the second set there are items from the first set with a correlation greater than 0.3. These items are the impact on profitability with a negative correlation of -0.313 and the new forms of cooperation with other organizations with a positive correlation of 0.308. The interpretation is that there is a certain probability that some state measures could harm the profitability of some financial organizations, while cooperation with other organizations may result in a positive synergetic effect.

The second set also includes leadership, which is certainly conditioned by the reduction of the number of components in factor analysis from five to two, for simpler analysis, but leadership, as such, should certainly be retained as part of the scale and as part of potential research.

To conclude, with a help of the remarks of our respondents, COVID-19 has had an impact on the situation in the financial sector, but thanks to the responsible and careful internal measures, as well as the external measures, primarily by the central bank, the challenges have been largely met. The financial activity has slowed down, but the private corporate sector has borne a heavier burden during the current crisis. The finance industry sustains because COVID-19 successfully accelerated digitalization and transition of clients to online banking. COVID-19 affected all sectors, including the financial sector, but it mostly affected people who lost their jobs. Our final conclusion is that the financial system in Serbia was effective and sustainable during the COVID-19 pandemic. The system has successfully dealt with the current pandemic, and as vaccination accelerates, we can assume that the sustainability of the financial system will be successfully maintained until the end of the pandemic outbreak.

References

- Adžić, S., & Al-Mansour, J. (2021a). Business analysis in the times of COVID-19: Empirical testing of the contemporary academic findings. *Management Science Letters*, 11(1), 1–10. <https://doi.org/10.5267/j.msl.2020.8.036>
- Adžić, S., & Al-Mansour, J. (2021b). The Negative Impact of Covid-19 on Firms: Insights from Serbia. *Eastern European Economics*, 59(5), 472–486. <https://doi.org/10.1080/00128775.2021.1953387>
- Andryushin, S. A. (2020). Monetary-crediting policy of central banks before and after COVID-19. *Aktual'nye Problemy Ekonomiki i Prava*, 14(2), 223–234. <https://doi.org/10.21202/1993-047X.14.2020.2.223-234>
- Brown, R., & Rocha, A. (2020). Entrepreneurial uncertainty during the Covid-19 crisis: Mapping the temporal dynamics of entrepreneurial finance. *Journal of Business Venturing Insights*, 14, e00174. <https://doi.org/10.1016/j.jbvi.2020.e00174>
- Cavallino, P., & Fiore, F. D. (2020). Central banks' response to Covid-19 in advanced economies. *BIS Bulletin*, 21. <https://www.bis.org/publ/bisbull21.htm>
- Chang, C.-L., McAleer, M., & Wong, W.-K. (2020). Risk and Financial Management of COVID-19 in Business, Economics and Finance. *Journal of Risk and Financial Management*, 5. <https://doi.org/10.3390/jrfm13050102>
- Crabb, J. (2020). Sustainable finance will emerge stronger from Covid-19 rebalancing. *International Financial Law Review*.
- Đuričin, D., & Vuksanović-Herceg, I. (2021). The great reset of Serbia's economy during and after the COVID-19 crisis. *Ekonomika Preduzeća*, 69(3–4), 117–136. <https://doi.org/10.5937/EKOPRE2103117D>
- Flogel, F., & Gartner, S. (2020). The COVID-19 Pandemic and Relationship Banking in Germany: Will Regional Banks Cushion an Economic Decline or is A Banking Crisis Looming? *Tijdschrift Voor Economische En Sociale Geografie*, 3, 416. <https://doi.org/10.1111/tesg.12440>
- Goodell, J. W. (2020). COVID-19 and finance: Agendas for future research. *Finance Research Letters*, 35, 101512. <https://doi.org/10.1016/j.frl.2020.101512>
- Green, S., & Salkind, N. J. (2013). *Using SPSS for Windows and Macintosh: Analyzing and Understanding Data* (7th ed.). Pearson Education.
- Heussner, R., Ma'ilei, S., & Weston, S. (2020). How COVID-19 has impacted the financial services sector. *International Tax Review*.
- Jakopin, E. (2020). Effects of structural changes in the economy of the Republic of Serbia: Old problems, new reform challenges. *Ekonomski Horizonti*, 22(3), 191–208. <https://doi.org/10.5937/ekonhor2003191J>
- Korzeb, Z., & Niedziółka, P. (2020). Resistance of commercial banks to the crisis caused by the COVID-19 pandemic: The case of Poland. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 15(2), 205–234. <https://doi.org/10.24136/eq.2020.010>
- Lagoarde-Segot, T., & Leoni, P. L. (2013). Pandemics of the poor and banking stability. *Journal of Banking & Finance*, 37(11), 4574–4583. <https://doi.org/10.1016/j.jbankfin.2013.04.004>
- Lapinskiene, V. (2020). Lessons learnt from COVID-19: Building a resilient finance function. *International Tax Review*.
- Li, L., Strahan, P. E., & Zhang, S. (2020). Banks as Lenders of First Resort: Evidence from the COVID-19 Crisis. *Review of Corporate Finance Studies*, 9(3), 472.
- Martin, V. (2020). The response of the monetary and fiscal policies on COVID 19 in Serbia. *Bankarstvo*, 49(2), 70–114. <https://doi.org/10.5937/bankarstvo2002070M>
- Mijović, B. (2020). COVID-19: Lessons learned. *Scripta Medica*, 51(1), 1–5. <https://doi.org/10.5937/scriptamed51-25824>
- Mugano, G. (2020). The economy nexus of the COVID-19 pandemic. *Sociološki Pregled*, 54(3), 737–760. <https://doi.org/10.5937/socpreg54-27700>
- Pallant, J. (2016). *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using IBM SPSS* (6th ed.). McGraw-Hill Education.
- Paunović, B., & Aničić, Z. (2021). Impact of the COVID-19 crisis on SMEs and possible innovation responses. *Ekonomika Preduzeća*, 69(3–4), 169–184. <https://doi.org/10.5937/EKOPRE2103169P>
- Petrović, D., Petrović, M., Bojković, N., & Čokić, V. P. (2020). An integrated view on society readiness and initial reaction to COVID-19: A study across European countries. *PLOS ONE*, 15(11), e0242838. <https://doi.org/10.1371/journal.pone.0242838>
- Podtserkovnyi, O., & Vozniakovska, K. (2020). Ensuring the Central Bank Discretion in Issuing Stabilization Loans in Times of Covid-19 Pandemic. *Garantizar la discreción del banco central en la emisión de préstamos de estabilización en tiempos de la pandemia del Covid-19.*, 9(2), 65.

25. Qin, X., Huang, G., Shen, H., & Fu, M. (2020). COVID-19 Pandemic and Firm-level Cash Holding—Moderating Effect of Goodwill and Goodwill Impairment. *Emerging Markets Finance and Trade*, 56(10), 2243–2258. <https://doi.org/10.1080/1540496X.2020.1785864>
26. Sheth, J. (2020). Business of business is more than business: Managing during the Covid crisis. *Industrial Marketing Management*, 88, 261–264. <https://doi.org/10.1016/j.indmarman.2020.05.028>
27. Topić-Pavković, B. (2020). The Central Banks' policy response to COVID-19 pandemic. *Politeia*, 10(19), 11–28. <https://doi.org/10.5937/politeia0-26720>
28. Vesić, T., Petronijević, J., & Ravić, N. (2020). Crisis risk in the 21st century and their impact on the banking sector. *Trendovi u Poslovanju*, 8(2), 31–38. <https://doi.org/10.5937/trendpos2002031V>
29. Wójcik, D., & Ioannou, S. (2020). COVID-19 and Finance: Market Developments So Far and Potential Impacts on the Financial Sector and Centres. *Tijdschrift Voor Economische En Sociale Geografie*, 111(3), 387–400. <https://doi.org/10.1111/tesg.12434>
30. Zheng, C., & Zhang, J. (2021). The impact of COVID-19 on the efficiency of microfinance institutions. *International Review of Economics & Finance*, 71, 407–423. <https://doi.org/10.1016/j.iref.2020.09.016>



Slobodan Adžić

is a Full Professor at the University Union – Nikola Tesla's Faculty of Management in Serbia. He has also previously worked as an Assistant Professor at the Arab Open University in Kuwait and as a lecturer at the University of Hafr Al Batin in Saudi Arabia. Dr. Adžić holds a BSc in Economics from Belgrade University, an MBA from Lancaster University in the UK, and a Ph.D. from Megatrend University in Serbia. His areas of expertise include leadership and strategic management.



Marijana Milunović

has been employed at the Faculty of Management, Sremski Karlovci, University "Union - Nikola Tesla" in Belgrade, as an assistant professor since 2011, and now as an associate professor - scientific field of economic and financial management, since 2016. She graduated from the University of Singidunum in Belgrade at the Faculty of Tourism and Hotel Management and defended her master's thesis at the Department of Postgraduate Studies in 2009. She has a doctorate at the Faculty of Trade and Banking, Alpha University in Belgrade in 2011. She published a number of original, scientific papers and participated in numerous international and domestic, scientific and professional conferences and symposiums. She is a member of the Scientific Society of Economists of Serbia (NDE S) and a member of the program committee for an international scientific conference.



Adrijana Vuković

has been employed at the Faculty of Law, Security and Management "Konstantin Veliki", University "Union - Nikola Tesla" in Belgrade, as an associate professor - scientific field "Economic Sciences" and "Management and Business", since 2018. She graduated from the Faculty of Management "Braća Karić" in Belgrade, in 2007. At the Faculty of Trade and Banking "Janičije and Danica Karić" in Belgrade, she completed a master's degree in 2008. She has a doctorate at the Faculty of Trade and Banking, Alpha University in Belgrade in 2012. The main scientific research areas that she conducted are economic trends and competitiveness of the economy, as well as international business finance. She has published a large number of scientific papers and is a participant in numerous international and domestic scientific and professional conferences.



Nenad Marković

graduated from the Faculty of Technical Sciences in Novi Sad and completed his master's studies in 2003 at the Faculty of Management of "Braća Karić" University. He started his teaching career in 2001 as an assistant at the Faculty of Management FAM. In 2005, he obtained his doctorate at the University of the Academy of Economics. The same year, he established a working relationship in the Republic of Srpska at the High School for Service Business, East Sarajevo, Bosnia and Herzegovina. He was elected full professor in 2015 at Union University - Nikola Tesla. Since November 2021, he has been acting as the dean of the Faculty of Management FAM.