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BANKING SECTOR IN BOSNIA AND HERZEGOVINA BETWEEN GLOBAL FINANCIAL CRISIS AND COVID-19

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Review

Abstract

Stable and good operating banking sector is important for stability of financial system and development of national economy. Having on mind specific features of financial system in Bosnia and Herzegovina as banking dominated, authors will analyse changes in its banking sector in the period between global financial crisis and COVID-19. Banking sector in Bosnia and Herzegovina has been analysed through a series of indicators. Authors in this paper will analyse number of banks in banking sector, bank intermediation, total assets, loans and deposits, credit risk expose of banks and liquidity. Aim of this paper is to compare behaviour of banking sector in two crises and present impact of its activities and performance (profitability, liquidity and risk).

Keywords: *bank, global financial crisis, COVID-19, structure, performance, Bosnia and Herzegovina.*

JEL: G01, G21

1. INTRODUCTION

Financial system of Bosnia and Herzegovina is “bank dominated”, which means that banks (credit institution) are dominant financial institutions in the financial system. Banks have major role in financial intermediation process. However, in the last few years there is an increasing role of financial markets and other non-banking financial institutions in the intermediation process between savers and investors. Share of banking assets in total assets of financial system reached 80% at the end of 2018.¹ Rising share of banking sector reflects the increasing size and development of this sector within financial system.

Over the past 20 years, banking sector in transition countries has undergone a transformation characterised with reconstruction, privatisation, consolidation and stabilisation. For the most of transition sectors, within former centrally planned economy, monobank system was characteristic, with a combination of central bank and commercial bank functions. With process of transition, consolidation in banking system in BiH also started and it involve operation associated with the removal of bad loans extended before 1990 and operation to improve their capital adequacy.

In the last decades banking sector in BiH records increase of all performance and significant changes in structure of banking market (consolidation, concentration, domination of foreign capital, competition). As s major part of still underdeveloped BH financial system, it is important to analyse stability of banking sector. Therefore, it is important to analyse behaviour of banking sector in the period between two crises in the last decades and its impact on performance of banking sector. The financial crisis that erupted in 2008 began with the “bursting of the bubble” that had formed in the real estate market in America, but also in many other countries - such as Ireland, Spain and England.² Coronavirus has further amplified profitability concerns for all financial sectors and is expected to result in deteriorating asset quality.

2. STRUCTURE OF BANKING SECTOR IN BOSNIA AND HERZEGOVINA

The best way to analyse the banking sector is analysing changes in the market structure. Therefore, it is important to research: consolidation, current situation

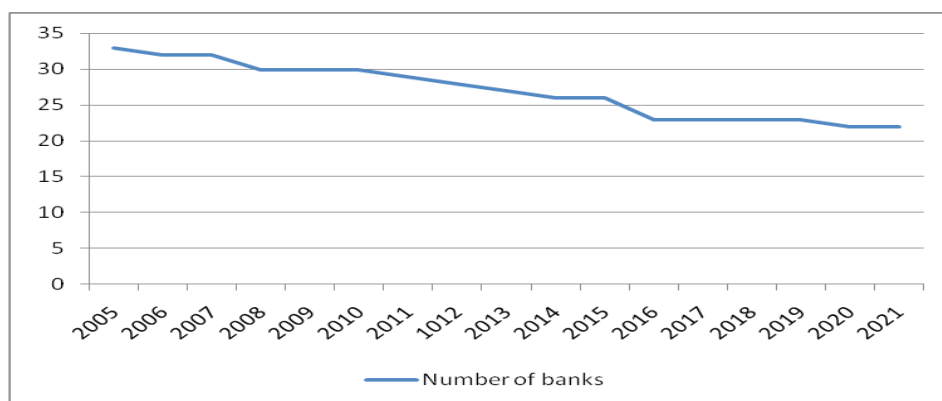
¹ Čolak, A, Živko, I, Grbavac, J.: Main feature of B&H financial structure and integration in EU financial structure and integration in the EU financial system, Economic System of European Union and Accession of Bosnia and Herzegovina – Challenges and Policies Ahead, Mostar, 2020, pp. 271.

² Jurčić, Lj.: Financijska kriza i fiskalna politika. Ekonomski pregled. 61. (5-6). 2010, pp. 317-334.

and trends in banking intermediation, ownership structures in banks, and concentration and competition on banking market and position of banking sector in financial system and relation with other financial institutions and markets.³

After cleaning the bad loans in bank's assets, bank starts with strengthening the capital for normal operation. The process of capitalization in transition countries was aimed to improvement of capital adequacy and liquidity of banks at the national level. Higher capital requirements put banks in front of process of mergers and acquisitions. Consolidation of banking sector lead to reduction of number of banks from 55 in 2000 to 29 banks at the end of 2011, and 22 at the end of 2021.

Graph 1: Number of banks in the banking sector of Bosnia and Herzegovina



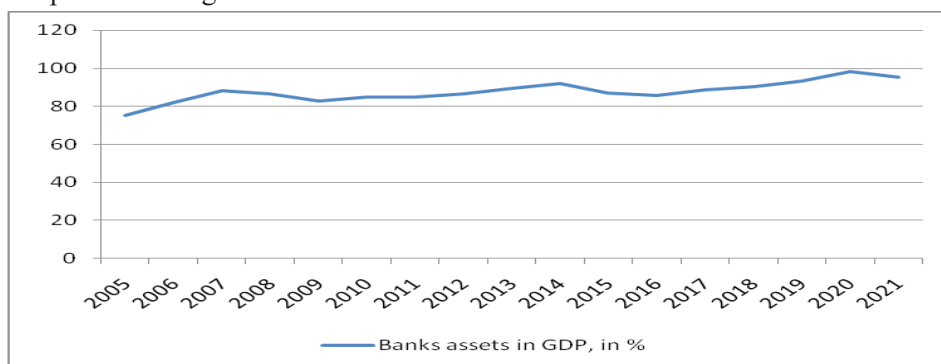
Sources: CBBH, Statistical portal, different years

Graph 1 shows how number of banks has been declining since the financial crisis 2008 and COVID-19 as response on the challenges of changing business conditions.

Banking intermediation indicates the role of banks in achieving the core functions – the accumulation and allocation of money resources. The share of domestic bank's claims on the private sector of banking sector assets and GDP is the most common approach in the financial literature when we measure and compare degree of banking intermediation. Bank intermediation, together with data on the number of banks, offices, branches of a country is indicators of financial development. Banking sector in BiH showed positive trends in financial intermediation before global financial crises and COVID-19.

³ Živko, I., Jurić, J., Jerinić, M.: Synergy of Financial and Real Sector in Bosnia and Herzegovina on the Path to the EU Integration,

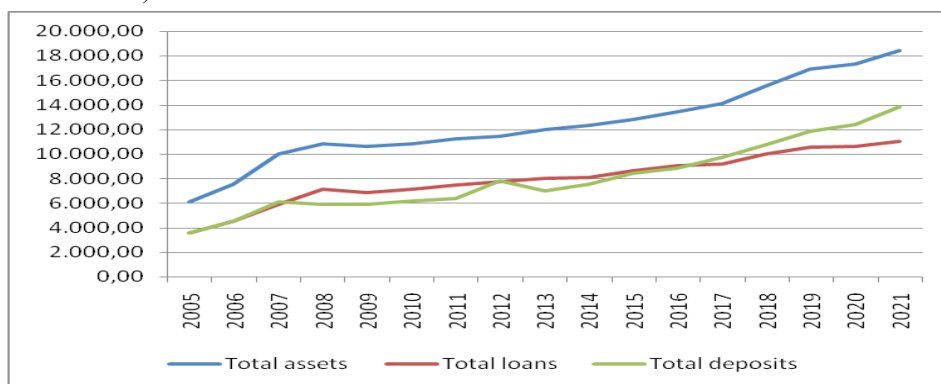
Graph 2: Banking intermediation in banks of BiH 2005-2021



Sources: authors

By analysing banking intermediation in BiH trend of financial deepening and intensive banking activities can be seen. Global financial crisis has slowed down banking intermediation in period from 2008 to 2011 and again COVID-19 crisis in 2020. Rising share of banking sector reflects the increasing size and development of this sector within the economy. Increasing banking intermediation in bank-based financial system implicates availability of financial resources to other segments of national economy that shows need for it.

Graph 3: Total assets, loans and deposits in banking sector of BiH, 2005-2021 (in billion euro)



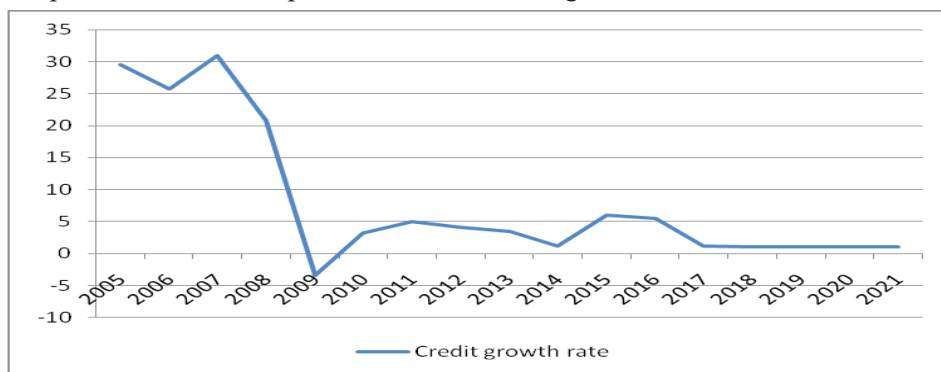
Sources: authors

Total banking sector asset in BiH amounted 18,5 billion euros at the end of 2021 what presented increase for 1% in comparison with the previous year. In the structure of banks assets credits dominate and deposits in the structure of liabilities. That structure shows that banks in BiH are still “credit-deposit” financial institutions, without developed investment function. Total loans were 11 billion euro at

the end of 2021, while total deposits reached 13,8 billion euro. After three years of dynamic growth in lending activity, in 2020 there was a significant slowdown in credit growth, with the amount of loans slightly higher than at the end of 2019.

In graph 4 we can see volatility of credit activities in BH banks. It is obvious how banks recorded positive trend in years before 2008. In 2009, banks have decreased credit activities for about 24.24% from 20,79% to -3.45% under effect of financial crises. After 2009, banking sector recorded slow recovering measured with growth of credit activities.

Graph 4: Growth credit portfolio in BiH banking sector, 2005-2021



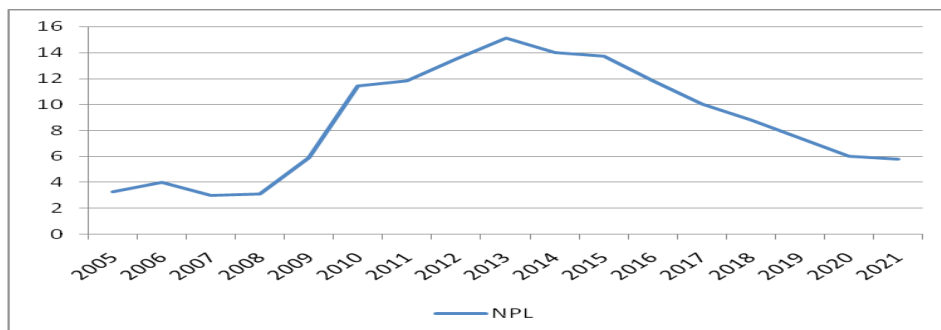
Sources: authors

After three years of dynamic growth in lending activity, in 2017 there was a significant slowdown in credit growth, with the amount of loans slightly higher than at the end of 2021.

3. PERFORMANCE OF BANKING SECTOR IN BOSNIA AND HERZEGOVINA

The global financial crisis in 2008 had impacted the credit activity in the banking sector in BiH. Result of negative impact of financial crisis was increased credit risk (non-performing loans NPL) and decreased indicators of profitability of BH banks (graph 5 and 6). Despite the unfavourable business circumstances in 2020, health of almost all financial indicators have improved and quality of credit was increased.

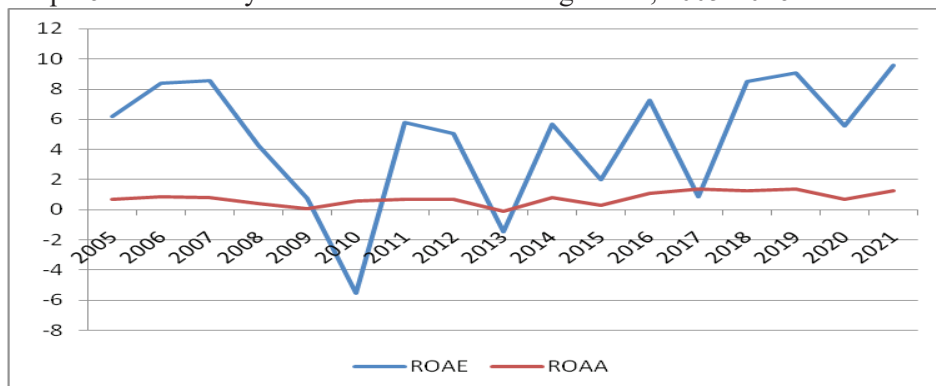
Graph 5: Non-performing loans in BH banking sector, 2005-2021



Sources: authors

In graph 5 we can see impact of financial crisis on non-performing loans in B&H banks in the period from 2008 to 2013. After 2014 quality of credit portfolio increase and trend has continued.

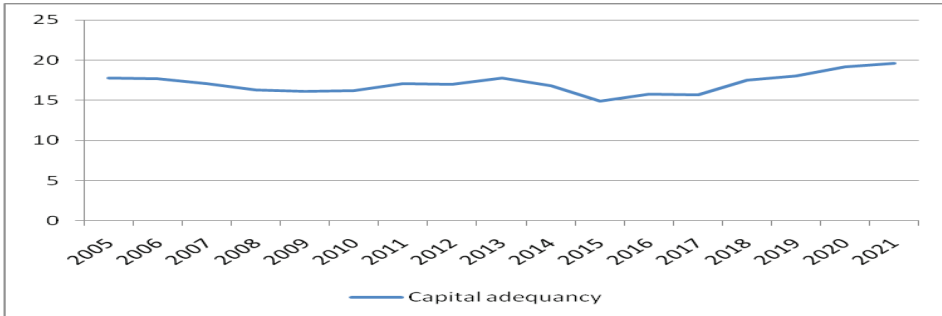
Graph 6: Profitability indicators for BH banking sector, 2005-2016



Sources: authors

Due to the economic downturn, activities significantly reduced net profit compared to the previous year which is best seen in the movement of return on equity.

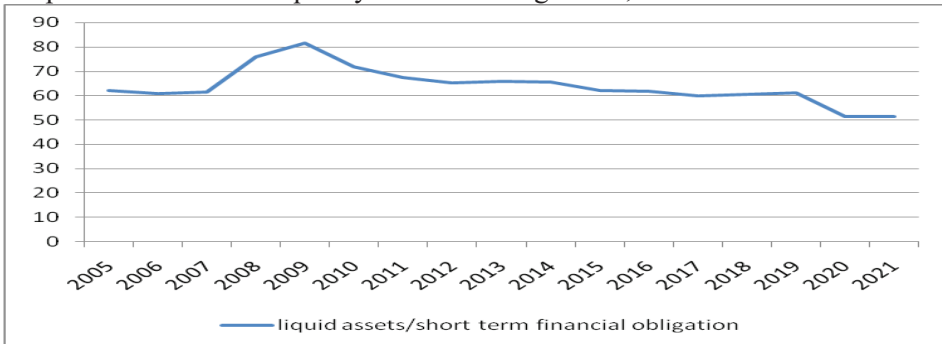
Graph 7: Capital adequacy rate in BH banking sector, 2005-2021



Sources: authors

Adequacy capital rate shows adequacy of capital in banking sector to cover risk weight assets. The capital adequacy rate in BiH banks decreased from 2007 to 2011. Reason for decrease in 2007 was strong credit activities of banks that were not in correlation with bank capital increase. In 2008, capital adequacy rate decreased as results of a strong credit risk increase. In 2013 capital adequacy decreased because regulators in BiH involve new regulation in calculation of capital adequacy. In period before COVID-19 banks increase their absorption power for potential shock.

Graph 8: Indicators of liquidity in BH banking sector, 2005-2021



Sources: authors

Data from Graph 8 point to a continuous weakening of the liquidity position of banks in the banking sector of BiH. Although liquidity indicators are decreasing, the liquidity of banks in BiH is still satisfactory.⁴ Banks in the EU entered in the

⁴ LRC at the end of 2020 was 219,60 according to date of CB B&H, regulators prescribe value 100

COVID-19 crisis in better shape than they did in previous global financial crises.⁵ We can conclude that same situation was in banking sector in BiH.

4. CONCLUSION

Banking sector in BiH records increase of all performance and significant changes in structure of banking market (consolidation, concentration, domination of foreign capital, competition). As major part of still underdeveloped BH financial system, it is important to analyse stability of banking sector. As results of two crises, the global financial crisis 2008 and COVID-19, economic activities in BiH decrease. In same period banks decreased credit activities. When we compare the impact of the two crises on the banking sector of BiH, it would be evident that there are some differences at the moment. In relation to the global financial crisis 2008, banks in BiH preserved the quality of the loan portfolio in the COVID-19 crisis and improved capital adequacy. In period of both crisis banks' lending activity has slowed, and the biggest impact of crises is seen in the profitability of banks. The final impact of the COVID-19 crisis cannot yet be seen; as certain measures have been put in place by regulators aimed at safeguarding the stability of banks. The uncertainty of economic and market developments puts before banks the need to respond readily to possible further market corrections and deterioration of financial market liquidity.

REFERENCES

1. Central Bank Bosnia and Herzegovina, Annual report, different years
2. Central Bank of Bosnia and Herzegovina, Financial Stability Report, different years
3. Cornett, M, McNutt, J, Strahan, Ph, Tehranian, H.: "Liquidity Risk Management and Credit Supply in the Financial Crisis." *Journal of Financial Economics* 101(2), 2011, pp. 297–312.
4. Čolak, A, Živko, I, Grbavac, J.: *Main Feature of B&H Financial Structure and Integration in EU Financial Structure and Integration in the EU Financial System, Economic System of European Union and Accession of Bosnia and Herzegovina – Challenges and Policies Ahead*, Mostar, 2019, pp. 271
5. ECB, *Financial integration in Europe*, March 2007, pp. 37
6. European Banking Authority, *The EU Banking Sector – First Insight in Covid-19 impact*, 2020

⁵ European Banking Authority, *The EU Banking Sector: First Insight into the COVID-19 Impact*, 2020, pp. 5.

7. Ivashina, V, Scharfstein, D.: "Bank Lending during the Financial Crisis of 2008." *Journal of Financial Economics* 97(3), 2010, pp. 319–338.
8. Jurčić, Lj.: Financijska kriza i fiskalna politika. *Ekonomski pregled*. 61. (5-6). 2010, str. 317-334.
9. Gadžić, M., Slijepčević, S., Živko, I.: Challenge for Bank Supervision in South-Eastern European Countries, *An Enterprise Odyssey: Tourism - Governance and Entrepreneurship*, Faculty of Economics and Business Zagreb, Croatia, June 2008, pp.10
10. Demirguc-Kunt, A., Pedraza, A., Ruiz-Ortega, C., *Bank Sector Performance During the Covid-19 Crisis*, Policy Research Working Paper 9363, WB, 2020.
11. Foss, D., Norden, L., Weber, M.: Loan growth and riskiness of banks, *Journal of Banking and Finance* 34, 2010, pp. 2929–2940.
12. Pavković, A., Hrgović, R., Cesarac, A.: Impact of Non-Performing Loans on Banks' Loan Portfolio and Economic Growth in the Republic Croatia and Bosnia and Herzegovina, *Zbornik radova Ekonomskog fakulteta Sveučilišta u Mostaru*, special issue, 2019. pp. 14. <https://doi.org/10.46458/27121097.2018.SI.7>
13. Pejić Bach, M., Posedel, P., Stojanović, A.: Determinante profitabilnosti banaka u Hrvatskoj, *Zbornik Ekonomskog fakulteta u Zagrebu*, VII (1), 2010, pp. 81-92.
14. Živko, I., Gadžić, M., Skoko, B.: Changes in Banking Structure in Bosnia and Herzegovina and Integration in EU Banking Market, *Economic Integration, Competition and Corporation*, Opatija, Croatia, 2016, pp. 350-363.
15. Živko, I., Jurić, J., Jerinić, M.: Synergy of Financial and Real Sector in Bosnia and Herzegovina on the Path to the EU Integration, *Economic System of European Union and Accession of Bosnia and Herzegovina – Challenges and Policies Ahead*, Mostar, 2020, pp. 106.

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BANKARSKI SEKTOR U BOSNI I HERCEGOVINI IZMEĐU GLOBALNE FINACIJSKE KRIZE I COVID-19

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Pregledni rad

Sažetak

Stabilni i operativan sektor bankarstva važan je za stabilnost finansijskog sustava i razvoj nacionalnog gospodarstva. Imajući na umu specifičnosti finansijskog sustava u Bosni i Hercegovini kao bankarski dominantnog autori će analizirati promjene u bankarskom sektoru u razdoblju od finansijske krize 2008. do COVID-19. Bankarski sektor u Bosni i Hercegovini analiziran je kroz odabrane pokazatelje strukture bankarskog sektora i njegove performanse u razdoblju od 2005-2021. U radu će se analizirati broj banaka u bankarskom sektoru, bankarsko posredovanje, ukupna aktiva, krediti i depoziti, izlaganje banaka kreditnom rizikom i likvidnost. Cilj ovog rada je usporediti ponašanje bankarskog sektora u dvije krize i prikazati utjecaj kriza na aktivnosti banaka i njihove performanse (profitabilnost, likvidnost i rizik).

Ključne riječi: *banka, globalna finansijska kriza, COVID-19, struktura, performanse, Bosna i Hercegovina.*

JEL: G01, G21