THE IMPACT OF PROBLEMATIC LOANS ON THE BANKING COMPETITIVENESS – case study of OTP group

Gordana Đuranović,
Legal expert for corporate loan debt collection at OTP Banka Srbija ad and PhD candidate at Singidunum University-Belgrade
Gordana.zezelj.11@singimail.rs

Sanja Filipović,
Full professor at Singidunum University-Belgrade and Principal Research Fellow at the Institute of Social Sciences
sfilipovic@singidunum.ac.rs

ABSTRACT
Credit risk as a risk in basic, traditional, and most important banking business – the bank loan, is one of the biggest financial risks, considering that borrowers (debtors) defaults, directly affect the bank's financial result and capital, and thus its competitiveness in the market. The impact of problematic loans on banking operations will be discussed for 2019-2021 on the example of OTP banking Group operating in 11 countries, to find out if there is a relation between NPL volume and the banking competitiveness. A comparative analysis method has been applied, comparing the profit, the NPL rate and the market position within the banking sector of the country to which each Group member belongs. Results has shown that the reduction in the volume of non-performing loans affected the increase in the competitiveness of banks, as well as that member banks located in European Union countries have a lower percentage of non-performing loans in relation to the member banks of the group operating in countries outside the European Union. The reduction of the percentage of bad loans is certainly in harmonization with the regulations of the European Union, but also in their better implementation.

Keywords*: NPL, COMPETITIVNESS, BANKING,*

JEL classification*: G21, G32*

1. INTRODUCTION

Credit risk is "the risk of potential occurrence of adverse effects on the bank's financial result and capital due to debtor's default to meet its obligations to the bank" (National Bank of Serbia, 2020), and as such, generates the possibility of bad loans increase. The global economic crisis caused by the Covid pandemic has brought credit risk management into the focus of the banking sector striving to prevent an increase in the number of bad loans. Considering its importance and the influence of the credit risk possibility on the success in business and the bank's liquidity position, it is necessary to manage risk. For this purpose, a number of rules have been established, including the Basel Accords. In 1988, the international risk-based capital standard was set in the form of an agreement known as Basel I, and later, the 2004, Basel II Accord as well as the 2010 Basel III Accord, regulating and improving the risk management process to adequately cover all risks with capital (Basel Committee for Banking Supervision, 2010). The increase in the amount of non-performing loans (NPL) in the bank's assets requires an increase in provisions for potential losses in the future, which reduces the amount available for lending and directly affects the bank's financial results (Mirković and Knežević, 2014). This paper will analyze the relationship between the increase in non-performing loans and the bank's business results and competitiveness on the example of the OTP banking group. OTP Group stands out for its business results as one of the best

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banking groups since its Hungarian subsidiary was declared in 2021 the "Best Bank in Central and Eastern Europe," according to the annual ranking by the magazine "Banker," a member of the Financial Times group, and received the award "The best bank in Central and Eastern Europe by the Euromoney Awards for excellence in 2021. In addition, the OTP Group members are declared the best bank in Serbia, Bulgaria, Montenegro, and Albania. In Hungary, Montenegro, Croatia and Slovenia, they received the "Bank of the Year" award. (OTP bank Plc, 2022)

This paper consists of five parts. First, “Introduction” is opening the theme with causes of NPLs and reasons for risk management as well as the reasons for choosing OTP group as a subject of the research. In the second part, “Literature Review” is given an overview of relevant literature considering bank risk management, the causes of bad loans and the impact of banking concentration, competition, and management, on the increase of bad loans and on the financial result and bank operations. The third part “Non –Performing loans - definitions, regulations and measures for reduction” provides an explanation of terms, definitions, EBA guidelines for the NPL reduction and ECB measures with the data on measures implemented in countries members of OTP banking group. In the fourth part, “Data and Discussion” is explained loan quality, NPL rates, market share and profit of the OTP Bank Group members in observed period. In the “Conclusion”, which is the last, fifth part of the paper, are given the findings. The results confirmed that bank market share and bank profit impact changes in NPL volume in bank group members which is also correlated with the banking competitiveness.

2. LITERATURE REVIEW

Bank risk management, the causes of bad investments, and especially the impact of banking concentration, competition, and management, on the increase of bad loans and on the financial result and bank operations, and therefore on the market position and competitiveness, as well as the mutual correlation of all of these factors are topics that are constantly current in economic theory. In 2012, a study of the effects of banking concentration on NPLs was carried out for banks from 10 Central and Eastern European countries (Slovenia, Slovakia, Poland, Bulgaria, Latvia, Lithuania, Estonia, Czech Republic, Croatia, and Hungary) covering the 2000-2009 period and obtained ambiguous results. Namely, a higher concentration level reduces NPLs in Slovakia, Latvia, and Estonia and increases them in Lithuania, Slovenia, Poland, Bulgaria, and Croatia, so it can be concluded that banking concentration does not reduce credit risk (Çifter, 2012).

Research conducted on Norwegian banks in the 1992-2014 period aimed to determine the relationship between NPLs and various measures of competition using accounting data. A non-linear relationship between market concentration and credit risk was found. For banks with a low concentration level, an increase in concentration affects the decrease in the NPL rate, and when a certain concentration level is exceeded, an increase in concentration affects the increase in the NPL rate. Using the interest margin and H-statistic as measures of competition, a positive linear relationship was found between competition and the NPL rate level, proving that competition increases credit risk (Heimdal and Solberg, 2015).

The research conducted in Macedonia analyzing the impact of specific banking and macroeconomic determinants on the NPLs of companies and households for the 2003Q4 to 2014Q4 period, showed that the profitability of banks, the increase in the number of loans to companies and households and growth of gross domestic product has a negative impact, while unemployment and bank solvency have a positive impact on the increase in NPL volume. Interestingly, when it comes to household loans, the results show that changes in the exchange rate have a negative effect, while inflation has a positive effect on the increase in NPLs (Kjosevski et al., 2019).

In 2019, the impact of financial development on NPLs was analyzed on a sample of 134 countries for the 2003-2014 period using the World Bank database of financial development indicators. The results showed that the increase in the NPLs level is related to financial development, implying a greater presence of foreign banks and more financial intermediation, which may be due to the lack of adequate supervision of banks when it comes to cross-country analysis, but the regional analysis shows NPL volume decreases in increasing financial development conditions. On the other hand, economic crises and banking concentration influenced the increase in NPLs (Ozili, 2019).

Karadima and Lauri (2020) used Lerner's index and CR5 and HHI, on a sample of 646 banks from 19 European Union member states to investigate the impact of banking concentration on NPLs. Focusing on the 2005-2017 period, they came to an conclusion that banking concentration has a positive effect on smaller increases or larger decreases in NPL rates in non-eurozone countries compared to eurozone countries. They also concluded that a greater presence of foreign banks is associated with a lower level of NPLs, change in the level of NPLs is caused by the market power of commercial banks, and that competition affects the reduction of the growth of new NPLs.

Research on the effects of NPLs and financial instability on banking competition, which was conducted within the Eurozone credit market in the period 2002Q1-2016Q4, showed that NPLs positively affected the increase in marginal costs and the degree of competition in the banking market and that higher NPL rate and greater financial instability increased competition on the credit market (Fernandez, 2020).

Whether the increase in NPLs can lead to reduced profitability of banks and credit activities is the question that the scientific work on 34 Vietnamese commercial banks in the 2005-2015 period tried to answer. The research showed that NPLs significantly negatively affect profitability and credit activity and reduce banks' attempts to improve loan offers (Vinh, 2017).

3. NON–PERFORMING LOANS – DEFINITIONS, REGULATIONS, AND MEASURES FOR REDUCTION

Problematic loans, i.e. NPLs do not have a generally accepted definition, but the definition adopted by most central banks is that they are generally loans with 90 or more days past due or loans unlikely to be collected without enforcement of collateral, regardless of the number of days past due or exposure (Bank for international settlement, 2016). NPLs can be expressed through the NPL rate, which indicates the coefficient of non-performing loans, better known as the NPL coefficient, which is the ratio of the amount of NPL in the bank's loan portfolio to the total amount of unpaid loans of the bank, and as such is an indicator of the bank's efficiency in receiving repayment of its loans (Hanks, 2018). According to the "Decision on the classification of bank balance sheet assets and off-balance sheet items" (National bank of Serbia, 2019), NPLs are “all claims on extended loans where payments of principal and interest are overdue by 90 days or more, based on which three-month (and higher) worth of interest payments are capitalized, refinanced, or delayed; or less than 90 days when there are other reasons to believe that the bank will not be able to collect the total claim on loan”.

There was a need to determine the impairment of financial assets and liabilities, so the International Accounting Standards Board (IASB) published in July 2014 the IFRS 9 - international financial reporting standard that introduced the concept of expected credit loss (ECL), which serves to recognize impairment and regulates the classification and measurement of financial assets and liabilities. Credit impairment recognizes impairments on an individual or collective basis in three stages. The first stage is loans up to 30 days past due (dpd), the second stage is 30 - 90 dpd loans, and the third stage includes NPL or 90+ dpd loans (Bank for International Settlement, 2017).

The action plan of the European Commission to reduce NPLs primarily implies the implementation of regulations that contain measures to reduce the level of the NPL portfolio (amendment of Directive 2014/59/EU, Directive 98/26/EC, Directive 2019/878, adoption of Regulation 2019/876 of the European Parliament and the Council on the amendment of Regulation (EU) No. 575/2013 and Regulation (EU No. 648/2012), adopted Guidelines on loan origination and monitoring, and the statutory creditworthiness provisions that banks must set aside in case of losses in the future, a proposal for a regulation that would encourage out-of-court procedures for recovery and the development of a secondary market of bad investments (Preuss et al., 2020).

The European Central Bank (ECB) has issued Guidance to banks on NPLs, which contains a strategy for managing NPLs and consists of assessments of the business environment, i.e., internal and external conditions affecting the collection of NPLs and the effect on capital, the development of a strategy for NPLs with qualitative (development of operational capabilities), and quantitative goals (NPL reduction forecast), implementation of the operational plan with the implementation of organizational changes and full integration of the strategy for NPLs into management processes (ECB, 2017). A year later, the European Banking Authority (EBA) issued final guidelines on risk management through additional strategies: retention strategy, portfolio reduction, change in type of exposure or collateral and legal options (EBA, 2018).

The central banks of the Eurozone countries and most of the other central banks are implementing the Guidelines published by the EBA and the Action Plan of the European Parliament and the Council. In 2020, the Croatian National Bank ordered banks to develop and submit internal strategies for managing NPLs by March 2021 in order to be able to identify risks at an early stage and manage exposure and perform increased supervision over the implementation of those strategies in accordance with the European Central Bank's Guidelines. During the pandemic, Bulgaria and Croatia had similar measures: a moratorium on loans, public guarantees, direct financing, and tax incentives. In addition, the Croatian National Bank reduced required reserves from 12% to 9% in March 2020 (Darvas & Martins, 2022). In 2020, the National Bank of Romania lowered the reference interest rate, maintained the system liquidity at a moderate level, maintained the stability of the exchange rate and acquired part of government bonds on the secondary market to increase yields. In the spring of 2021, with the reappearance of inflation, liquidity control was tightened, purchases of government bonds were stopped, and reference rate and interest rates were increased (Isărescu, 2022). The Bank of Slovenia requested the World Bank assistance in the management of micro, small and medium-sized enterprises, which resulted in the adoption of the "Manual for the effective management of non-profitable MSME loans," which, among other things, foresees the recognition of early warning signs, formation of a unit within the bank to manage bad investments, selection of suitable personnel, portfolio segmentation, collateral analysis, selection of strategies, negotiations, restructuring, initiation of court proceedings for collection (World bank, 2017). The most significant is generally credit risk management through early detection of deterioration in asset quality, management of bad assets in vulnerable sectors, and a moratorium on loan repayments (Bank of Slovenia, 2021).

The Central Bank of Hungary organized the National Asset Management Agency (NAMA), which in the 2012-2020 period implemented the Program for the Preservation of the Homes of Debtors with Mortgage Loans, so real estate became state-owned property, and beneficiaries participating in the program, 38,000 of them, rented these properties from the state at significantly more favorable prices with the possibility of buying them (Central bank of Hungary, 2021).

By adopting “The Strategy for Solving Non-Performing Loans” in 2015, the National Bank of Serbia (NBS), greatly contributed to reducing bad loans. The measures were to strengthen the banks' capacity through a new regulatory framework, to do collateral assessments more adequately, to develop the market for bad investments through tax reliefs when writing off NPLs to sell them, to establish procedures for assessing collaterals and internal procedures for valuing bank assets, improving the conditions for out-of-court restructuring, improving the legal framework for enforcement and bankruptcy proceedings and the legal framework for mortgages (NBS, 2015). During the Covid pandemic, the NBS provided more favorable financing conditions by reducing interest rates in general, reference interest rates, and interest rates on deposit and credit facilities. At the same time, dinar and foreign currency liquidity increased, and the ECB and NBS established a repo line in July 2020 to ensure liquidity in euros. There are also loans with the guarantee scheme of the Republic of Serbia and a series of moratoriums on loan repayments (NBS, 2020). The measures of the Central Bank of Montenegro for reduction are shown in the "Decision on minimum standards for risk management in credit institutions" and refer to monitoring the quality of loans, managing bad loans through strategies and strict procedures and operational plans, restructuring, changing the type of exposure or collection of credit exposure through the acquisition of debtor's property, applying legal options through out-of-court settlements and initiating bankruptcy proceedings and others (Central Bank of Montenegro, 2021). In addition, measures were applied to alleviate the Covid pandemic through three packages of measures (Ivanović et al., 2021), various reliefs for the economy and citizens through subventions, additional benefits, moratoriums on repayments, and new lending to the economy and citizens. Albania's Economic Reform Programme 2018-2020 foresees in reform number 10 reducing the level of NPLs in the banking system through 12 measures that include the write-off and sale of receivables, the recovery of bad investments, restructuring, monitoring, strengthening the institutional framework, and adapting the existing legal framework through new legislative solutions (Republic of Albania, 2018). Measures for out-of-court treatment of problematic placements include postponement of the due date of obligations, additional financing, liquidation of secondary businesses that are not directly related to the borrower's core business, increasing capital through financing, introducing changes in the way of conducting business, selling assets and converting assets into equity capital (Bank of Albania, 2019). As part of the response to the crisis caused by the Covid pandemic, interest rates were reduced, liquidity was increased, state guarantees were provided, a moratorium on loan repayments was offered, and a purchase agreement was concluded with the European Central Bank in 2020 for EUR 400 million to increase the liquidity of banks in case of need (EBRD, 2021).

In Moldova, loans are classified in accordance with the "Regulation on the classification of assets and contingent liabilities," approved by the Decision of the Board of Directors of NBM No. 231/2011. As for the practices of other countries, the approach is conservative as it prescribes that the financial position of the other party, compliance with contractual obligations, ability to pay based on historical data with an estimate of future cash flows, credit history, property status and ability to pay, guarantors, market value of collateral and degree of liquidity, etc., will be allowed for in the assessment (National bank of Moldova, 2011). Furthermore, in 2020, the National Bank of Moldova introduced a number of measures as relief for banks, the economy, and citizens, including restructuring existing obligations with modifying or postponing the due date of obligations, without classifying such loans in a worse investment category (National bank of Moldova, 2020).

In 2017, Ukrainian NPLs were at a dramatically high level of 60% in state-owned banks and 40% in international banks. After the National Bank of Ukraine adopted the methodology and policy of managing disputed receivables to the instructions of the European Union, Basel standards, and IFRS standards and applied the measures of monitoring, write-offs, and restructuring of placements in 2017, the level of NPLs fell to 30-40% in 2018-2021 (National bank of Ukraine, 2017). The National Bank of Ukraine authorized state banks to sell bad loans below their value, so this is the main measure to reduce the NPL volume state banks will apply in 2022 (Kozlovskyy, 2022).

Russia has a high level of NPLs, reaching 10% of the total loan portfolio in 2018. In 2020, it was at the level of 9%. In 2021, the Bank of the Russian Federation decided that households can suspend repayments for six months and advised creditors to restructure their investments and suspend the foreclosure of mortgaged real estate. In addition, borrowers can convert their foreign currency obligations from mortgage loans into rubles until May 31, 2022 (Black Sea trade and development bank, 2020). In order to prevent an increase in the number of bad placements, banks are allowed not to reduce the assessments of the quality of loans issued to those affected by sanctions and not to reduce assessments of the restructured loans. Therefore, since Banks do not have additional provisioning costs, this strengthens their financial stability and increases the amount of money available for new financing (Bank of Russia, 2021).

4. DATA AND DISCUSION

OTP Group has been listed on the Budapest Stock Exchange since 1995 and today has 17 million clients with 40,000 employees in 11 countries, where it operates in more than 1,700 branches. For the purposes of this paper, a comparative analysis of the NPL indicators of the Group member banks was performed for the 2019-2021 period, namely: Hungary, Croatia (OTP Bank Croatia), Slovenia (SKB Bank), Bulgaria (DSK Bank), Montenegro (Crnogorska Komercijalna Banka), Serbia (OTP banka Srbija ad), Albania (OTP Albania), Moldova (Mobiasbank), Romania (OTP bank Romania), Russia (OAO OTP bank) and Ukraine (CJSC OTP bank). OTP bank Slovensko (Slovakia), which was sold in 2019 to the KBC group, was excluded. The NPL rate and the possibility of its reduction or increase in relation to the quality of the credit portfolio and profit of the Group members will be analyzed for each Group member, as well as the market position within the banking sector of the country to which each Group member belongs.

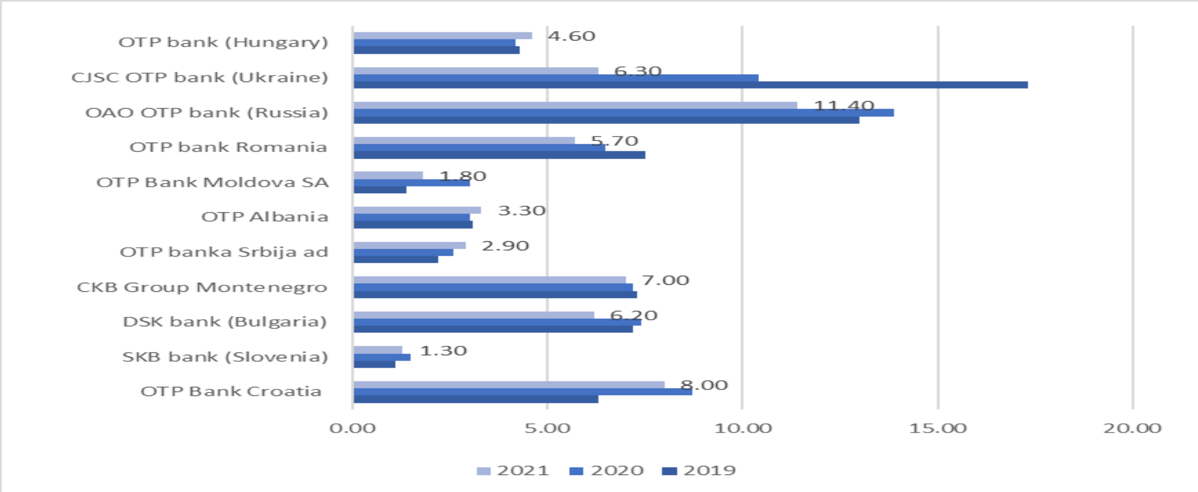
Table 1: Loan quality

Loans under IFRS 9/gross customer loans												
OTP GROUP DATA	Stage 1			Stage 2			Stage 3			90+ dpd		
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
OTP Bank Croatia	83.20%	76.60%	80%	10.50%	14.70%	12.10%	6.30%	8.70%	8%	3.70%	4.20%	4.10%
Own coverage of stage loans under IFRS 9(%)	0.80%	0.80%	0.60%	3.55%	5.70%	5.90%	63.60%	53.90%	61.40%			
SKB bank (Slovenia)	98.90%	82.90%	86%	0%	15.60%	12.70%	1.10%	1.50%	1.30%	0.40%	0.40%	0.40%
Own coverage of stage loans under IFRS 9(%)	0.40%	0.50%	0.30%	0%	4.30%	5%	8.70%	36.30%	56.10%			
DSK bank (Bulgaria)	88.60%	81.30%	84%	4.30%	11.30%	9.80%	7.20%	7.40%	6.20%	4.60%	4.80%	3.90%
Own coverage of stage loans under IFRS 9(%)	1.10%	1%	1%	9.80%	12.60%	15.50%	62%	65.60%	68.20%			
OTP CKB Group Montenegro	88.80%	81.40%	76.70%	3.90%	11.40%	16.30%	7.30%	7.20%	7%	5.30%	4.80%	4.50%
Own coverage of stage loans under IFRS 9(%)	1.10%	1.30%	1%	4.80%	9.30%	6.50%	68.20%	63.90%	66%			
Otp banka Srbija ad	96%	88.80%	89.90%	1.80%	8.60%	7.20%	2.20%	2.60%	2.90%	1.70%	1.50%	1.90%
Own coverage of stage loans under IFRS 9(%)	0.40%	0.80%	0.70%	5.80%	8.50%	6.10%	50%	53.60%	54%			
OTP Albania	93.80%	79.50%	87%	3.10%	17.50%	9.70%	3.10%	3%	3.30%	1.50%	2.20%	1.60%
Own coverage of stage loans under IFRS 9(%)	1.20%	1.30%	1.20%	10.10%	10.40%	11.40%	33.10%	54.20%	73.30%			
Mobiasbank(Moldova)	97.80%	92%	91.90%	0.80%	5.10%	6.20%	1.40%	3%	1.80%	0.40%	1.60%	1.30%
Own coverage of stage loans under IFRS 9(%)	1%	1.10%	1.30%	23.60%	19.50%	13.60%	39.70%	48%	54.30%			
OTP bank Romania	83.90%	80.20%	79.80%	8.70%	13.30%	14.50%	7.50%	6.50%	5.70%	5%	4.50%	3.50%
Own coverage of stage loans under IFRS 9(%)	1.30%	1%	1%	5.70%	9%	8.40%	53.70%	54.60%	57.50%			
OAO Otp bank (Russia)	75%	74.80%	76.50%	12%	11.30%	12.10%	13%	13.90%	11.40%	12.30%	13%	11.60%
Own coverage of stage loans under IFRS 9(%)	5.30%	4.60%	3.80%	27.40%	43.10%	31.10%	93.40%	93.40%	95.10%			
CJSC OTP bank(Ukraine)	73.80%	82.40%	87.10%	8.90%	7.20%	6.60%	17.30%	10.40%	6.30%	11.10%	6.40%	3.30%
Own coverage of stage loans under IFRS 9(%)	0.90%	1.90%	1.90%	8.30%	15.90%	18.50%	77.90%	74.30%	69.90%			
OTP bank(Hungary)	91.40%	77.90%	78.00%	4.20%	18%	17.40%	4.30%	4.20%	4.60%	3.20%	3.10%	2.50%
Own coverage of stage loans under IFRS 9(%)	0.80%	0.80%	1%	12.40%	10.10%	8.90%	55.40%	54.50%	42.70%			

(*Source: Data from annual reports of OTP bank Plc*)

According to the Table 1, the quality of the loan portfolio for all Group members is given by stages: 1- loans up to 30 days overdue (active placements), stage 2- loans that need to be monitored and which are 30-90 days in arrears , and phase 3 - NPL (more than 90 days in arrears or those that do not have the ability to pay, or have been sued, or they are restructured, or in bankruptcy and therefore belong to this group of loans). The presentation of the NPL rate within the OTP banking group is given in Figure 1. According to the latest data available for 2021, SKB from Slovenia had the lowest NPL rate of only 1.3%, while OAO OTP from Russia had the highest NPL rate of 11.4%. It is evident that due to the Covid pandemic in 2020, there was an increase in the NPL ratio in 6 countries, while in 5 countries the NPL ratio decreased (Hungary, Ukraine, Romania, Albania, Montenegro).

Figure 1: the OTP group - NPL rate



(*Source: Data from annual reports of OTP bank Plc*)

OTP bank Nyrt was founded in 1949 in Hungary as the National Savings Bank, and today it is the absolute market leader with a 25% market share. Stage 2 of the loan portfolio shows that the number of loans 30-60 days past due is decreasing after the jump in 2020 caused by the Covid pandemic, which further means that the number of loans from which new NPLs could be generated is decreasing (Table1). The NPL volume rose to 4.60% in 2021 (Figure 1).

OTP Group entered the Serbian banking sector by purchasing Zepter banka ad Beograd, Niška banka ad Niš, Kulska banka ad Novi Sad (2008), Vojvođanska banka ad Novi Sad (2019), and Societe general banka ad Beograd (2021). Currently, with a 13.1% market share, it is the second largest bank when it comes to assets. Phase 2 loans that are under monitoring do not tend to move into NPL, as their rate is declining and was lower in 2021 than in 2020, leading to an improvement in the loan portfolio (Table 1).

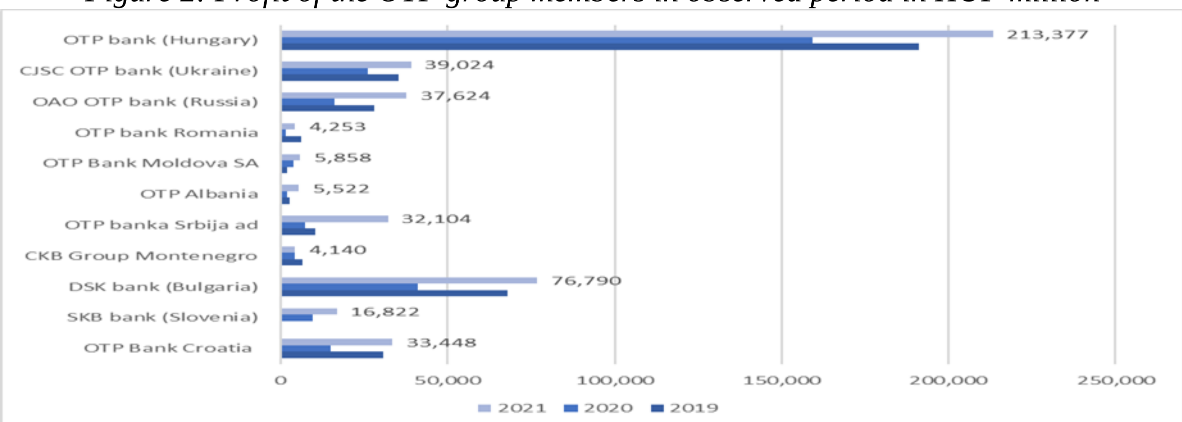
Crnogorska Komercijalna banka (CKB), a member of the OTP Group, merged Societe Generale Montenegro (2019) and Podgorička banka ad (2020) and leads with a market share of 14% and assets worth over one billion euros. The share of NPLs in the total share of loans fell from 7.3% in 2019 to 7% in 2021 (Figure 1). However, lending also decreased in the observed period, and overdue loans increased, so there is a tendency for NPLs to increase in the future (Table 1).

OTP banka Hrvatska dd is the fourth bank in terms of assets, with a market share of 9.89%. It was created by the purchase of Nova banka and the takeover of Banco Popolare Croatia in 2014, and Splitska banka in 2018. The percentage of NPLs in the total volume of loans increases in 2020 compared to 2019 and decreases in 2021 (Figure 1). Lending increased and overdue loans decreased (Table 1).

OTP Group entered the Albanian market in 2018 by purchasing the subsidiary of Societe General Bank in Albania and now operates under the name OTP Bank Albania SA with a market share of 6.4% and is the fifth largest bank in the market. The purchase of Alpha Bank

of Albania increased the market share to 11%. The percentage of NPL volume decreases and increases again in 2021 (Figure 1), but having in mind that overdue loans are decreasing, the NPL portfolio is also expected to decrease in the following period (Table 1).
OTP Group entered the Slovenian market by purchasing SKB Bank at the end of 2019 from Societe General Bank, the fourth bank on the market with a market share of almost 10%. In the spring of 2021, it bought Nova KBM, the second largest bank in the Slovenian market, with a market share of 20.5%. The NPL ratio is the lowest within the OTP Group ranging from 1.10% (2019) to 1.50% (2020) and 1.30% in 2021. Given that lending is on the rise, and the number of delinquent loans is decreasing, the NPL portfolio is not expected to increase.
In 2006, OTP Bank Plc. bought Raiffeissen bank Ukraine, which is now called OTP bank JSC and is currently the 9th largest bank in terms of assets in Ukraine with a market share of 2.65%. The NPL ratio was 17.30% in 2019, but it is decreasing progressively to reach 6.30% in 2021 (Figure 1). Loans in arrears are decreasing, but are forecast to increase again due to the current special operation of the Russian Federation in Ukraine (Table 1).
DKS Bank has been part of the OTP Group since 2003, in 2019 it merged with Societe General Expressbank in Bulgaria, and in 2021 the new bank is the second largest in the market with a market share of 18%. The NPL rate increases in 2020 and decreases in 2021 (Figure 1), as well as the number of overdue loans, which shows a further tendency to decrease the NPL portfolio (Table 1).
OTP Group entered the Russian market in 2006 by purchasing Investmentsberbank and it is the 46th largest bank on the market. Of all subsidiaries of OTP Bank, the NPL ratio is the highest in Russia and amounted to 13% in 2019, 13.90% in 2020, and 11.40% in 2021 (Figure 1). At the same time, in 2021, the number of overdue loans increased, which, in addition to inflation and the crisis caused by the special operation in Ukraine, and the sanctions that the Russian economy is facing, threatens to drastically increase the NPL portfolio in the future.
OTP Bank Romania is the ninth largest bank in Romania, with a market share of 4%. It was created by the purchase of RObanka in 2004 and merged with Millennium Bank Romania in 2015. The NPL ratio in the total loan portfolio is progressively decreasing (Figure 1). However, there are reasons for concern since the number of overdue loans, which can easily become non-performing investments, has increased (Table 1).
In 2019, OTP Bank Nyrt took over a majority share of 96.69% from Société Générale in the bank "Mobiasbancă - Groupe Société Générale" SA, and operates under the new name OTP Bank SA. It is currently the fourth bank in terms of assets in Moldova, with a 13.3% market share. Although the NPL is very low, the number of loans past due has increased (Table 1), so additional attention is required when monitoring loans.

Figure 2: Profit of the OTP group members in observed period in HUF million



(*Source: Data from annual reports of OTP bank Plc*)

As it is shown in Figure 2, OTP bank Hungary has the absolute highest profit and it amounts to HUF 213,337 million in 2021. DSK Bank also had a fantastic result in 2021 in the amount of HUF 76,790 million. Both Ukrainian and Russian subsidiaries achieved significant income despite the high values of the NPLs rates. CJSC OTP bank Ukraine had HUF 39,024 million profit in 2021, and OAO OTP bank Russia HUF 37,624 million, representing 7.9% of the entire group's profit. The lowest profit in 2021 was achieved by the Montenegrin subsidiary of the OTP Group in the amount of HUF 4,140 million, but the problem with it is that the profit constantly decreases from year to year, unlike other members of the group.
The research results show a decrease in NPLs in the total loan volume, which is directly proportional to the increase in the profit of the banks and the increase in the market share, and thus the competitiveness of the banks. A higher profit of the banks indicates a decrease in NPL. Out of 11 member banks of the Group, this thesis was confirmed on the example of seven banks with the exception of the Group's subsidiaries in Serbia, Albania, Montenegro and Hungary. Market leaders with a greater competitive advantage in terms of both market share and operating results have the lowest NPL rate in the overall portfolio. OTP Slovenia has the lowest percentage of NPLs in the total loan volume. Although it is the fourth in the market, it has by far the best result with values reduced from 1.50% to 1.30% in 2021 with a doubled profit, followed by OTP Moldova SA, which also made a significant profit and reduced NPL rate to 1.80% in 2021. In addition, OTP Bank in Hungary is the absolute leader in the Hungarian market with record high profits and a relatively low NPL rate of 4.60%. Serbia and Albania, as members of the OTP Group from the countries that received the status of members in the process of joining the EU, have surprisingly good credit quality, resulting from a successfully implemented risk management strategy. Therefore, the Serbian subsidiary had an NPL level of 2.90% and tripled its profits in 2021. It is the market leader in terms of the number of loans granted and the second largest bank, while the Albanian subsidiary more than doubled its profits in 2021 and has a 3.30% NPL rate. The Serbian and Albanian subsidiaries owe good profit-related results partly to the increase in market share. Still, their NPL portfolio, as well as that of OTP Bank Hungary, slightly increased, which may also be the result of challenges during the merger of banks. When it comes to OTP bank Hungary, the measures of the European Central Bank from 2020, which imply the interest rate reduction to promote economic growth and public consumption, have affected the increase in inflation, which had a negative impact on the level of NPLs. Among the members of the OTP Group from the EU countries, the poorest result was recorded for DSK Bank Bulgaria, which achieved exceptional profits and is the second largest bank in terms of assets in the Bulgarian market, but its NPL volume is higher than the profit of OTP Bank Romania, which is only 9th by size with a 4% market share in the banking sector of Romania and with the lowest profit of all EU OTP Group members. At the back are the subsidiaries in Ukraine and Russia; they both have worse market positions than other members of the OTP Group (Ukraine is 9th in terms of assets, and Russia is only 46th in the Russian banking market) and the largest NPL volume. OTP bank Moldova also has a very good result considering that it belongs to the banking market outside the EU zone, and Moldova has not yet received the status of a member country in the process of joining the EU. At the same time, OTP CKB Montenegro recorded a decrease in NPLs and a decrease in profits in the observed period.

5. CONCLUSION

The economic crisis that hit the world due to the Covid pandemic did not have much of an impact on the OTP banking group loan quality, as shown by the share of NPLs in the total loan portfolio for all three observed years: in 2019 as the year that preceded the economic crisis caused by the Covid pandemic, in 2020 as the year in which financial instability was expressed, and in 2021. The thesis confirmed that banks with better performance, greater market share in the banking sector of the country in which they operate, and greater profit had a smaller volume of NPLs. From the attached data on the operations of the Group members, it is evident that the EU member countries, which have the lowest NPL volume, showed a better result. Good example is the subsidiary of OTP Bank in Slovenia standing out as the 4th bank in terms of assets in the Slovenian banking market with the NPL rate of 1.30% in 2021 and a fantastically low percentage of loans that are more than 90 days past due, which is stable at 0.4% throughout all three years.

OTP Bank in Hungary, as the absolute market leader with a 25% market share, showed the highest profit, but also a very low share of NPLs in the total credit portfolio of 4.60% in 2021. OTP Group members from Albania, Moldova and Serbia recorded a significant increase in profit in the observed period and a very low NPL rate, which indicates the successful implementation of credit risk strategies.

It was found that as the business profit increases, the NPL percentage in the total credit portfolio decreases, which was confirmed in the example of 7 out of 11 Group members (the exceptions are the Hungarian, Serbian, Albanian and Montenegrin members of the OTP group).

Considering all the above, the conclusion is that NPLs are negatively correlated with banks' competitiveness since the results showed that the NPL volume is lower in banks with better operating results and, therefore, a better market position.

In addition, when the NPL ratio increases, profit decreases, which was confirmed by the example of the Group member banks from Serbia, Russia, Bulgaria, Slovenia, and Croatia during the critical year of 2020, when all of them recorded a decrease in profit. The strength and financial stability of the OTP Group are also reflected in the fact that 6 out of 11 Group members successfully resisted the financial instability in the most challenging year (2020) and that the NPL did not increase but continued to decrease continuously (banks in Hungary, Croatia, Montenegro, Romania, Ukraine, and Albania).

The banks of the EU member states showed greater recovery in 2021 since the banking markets within the EU are less susceptible to external shocks and are far more stable. Given that banks from Ukraine and Russia, which are in conflict, operate within the OTP Group, it remains to be seen how much the NPL portfolio will increase in these countries and how these results will affect the profitability of subsidiaries in those countries as well as their competitive advantage and the market position of the entire Group, which could be the subject of further research.

REFERENCES

Bank for International Settlement (2017), “IFRS 9 and expected loss provisioning – Executive Summary“, available at: https://www.bis.org/fsi/fsisummaries/ifrs9.htm, (accessed 01 August 2022)

Bank of Albania (2019), “Decision on approval of regulation on out-of –court treatment of distressed borrowers by banks“, available at: https://www.bankofalbania.org/Supervision/Regulatory_Framework/Supervision_regulations/Regulation_51_2019_On_out-of-court_treatment_of_distressed_borrowers_by_banks.html (accessed 08 August 2022)

Bank of Russia (2021), “Results in brief-the Bank of Russia work 2021“, available at: http://www.cbr.ru/collection/collection/file/41054/rb_2021.pdf available at: (8 August 2022)
Bank of Slovenia (2021), “Annual report“, available at: https://www.bsi.si/en/publications/annual-report (accesed 10 August 2022)
Basel Committee on Banking Supervision (2010), “Basel III: A global regulatory framework for more resilient banks and banking systems“, available at: https://www.bis.org/publ/bcbs189.pdf (accessed on 6 August 2022)
Basel Committee on Banking Supervision (2016), “Guidelines - Prudential treatment of problem assets – definitions of non-performing exposures and forbearance“, Available at: https://www.bis.org/bcbs/publ/d403.pdf (accessed on 15 July 2022)
Black Sea Trade and development Bank (2020), “Overview of the financial sector in Russia“, available at: https://www.bstdb.org/Overview_of_the_fin_sector_RUSSIA.pdf (accessed 5 August 2022)
Centralna Crnogorska banka (2022),”Bilansi stanja i bilansi uspjeha banaka”, available at: https://www.cbcg.me/me/kljucne-funkcije/kontrolna-funkcija/bilansi-stanja-i-bilansi-uspjeha-banaka, accessed 01 August 2022
Çifter, A. (2012), “Bank concentration and non-performing loans in Central and Eastern European countries”, *Journal of Business Economics and Management*, vol. 16, no.1, pp. 117–137
Croatian National bank (2018), “Risk reduction measures in EU banking sector”, available at: https://www.hnb.hr/en/-/mjere-za-smanjenje-rizika-u-europskom-bankovnom-sektoru (accessed 08 August 2022)
Darvas, Z., Martins, C. (2022), “Close cooperation for bank supervision: The cases of Bulgaria and Croatia“, working paper PE 699.523 ,in-depth Analysis requested by the ECON committee, Europian Union, 2022
European Bank for Reconstruction and Developement (2021), “The transition report 2020-21-the state strikes back“, available at: https://www.ebrd.com/news/publications/transition-report/transition-report-202021.html (accessed 10 August 2022)
European Bank for Reconstruction and Development (2021), “The transition report 2020-21“, available at: https://www.ebrd.com/publications/transition-report-202021-russia (accessed 12 August 2022)
European Banking Authority (2018), “Final Report - Guidelines on management of non-performing and forborne exposures“, available at: https://www.eba.europa.eu/sites/default/documents/files/documents/10180/2425705/371ff4ba-d7db-4fa9-a3c7-231cb9c2a26a/Final%20Guidelines%20on%20management%20of%20non-performing%20and%20forborne%20exposures.pdf (accessed on 4 July 2022)
European Central bank (2017), “Guidance to banks on non-performing loans“, available at: https://www.bankingsupervision.europa.eu/ecb/pub/pdf/guidance_on_npl.en.pdf (accessed 1 August 2022
European Central Bank (2020), “What are provisions and non-performing loan (NPL) coverage?“, avaliable at: https://www.bankingsupervision.europa.eu/about/ssmexplained/html/provisions_and_nplcoverage.en.html (accessed 15 July 2022)
Fernandez, J.M.M. (2020), “Non-Performing Loans, Financial Stability, and Banking Competition: Evidence for Listed and Non-Listed Eurozone Banks”, *Hacienda Pública Española / Review of Public Economics*, vol. 232(1), pp. 29-52
Hanks, G. (2018), “How to calculate the NPL Ratio?”, available at: https://bizfluent.com/how-8533153-calculate-npl-ratio.html (accessed 6 August 2022)

Heimdal, K.W. ,Solberg, K. J. (2015), “The effect of competition on non-performing loan rates -Evidence from the Norwegian banking market”, SNF working paper no. 11/15, Centre for applied research at NHH, Bergen, September 2015
Isărescu, M. (2022), “Policy support and the emerging “new normal”- how well-positioned are Romanian firms?”, Opening speech by Mr Mugur Isărescu, Governor of the National Bank of Romania, at the European Investment Bank (EIB) webinar "Investment and Investment Finance in Romania", 23 February 2022, available at: https://www.bis.org/review/r220311g.htm (accessed 08 August 2022)
Ivanović, M., Vujanović, N., Kilibarda, M. i Vlahović, A. (2021), “Analiza uticaja pandemije covid-19 na ekonomiju i bankarski sistem Crne Gore”, radna studija broj 29, Centralna banka Crne Gore, Podgorica, 2021.
Jordan Kjosevski, J., Petkovski, M. and Naumovska, E. (2019), “Bank-specific and macroeconomic determinants of nonperforming loans in the Republic of Macedonia: Comparative analysis of enterprise and household NPLs“, *Economic research-Ekonomska istraživanja,* vol. 32, no. 1, pp. 1185–1203
Karadima, M., and Louri, H. (2020), “Non-performing loans in the euro area: Does bank market power matter?”, available at: https://www.researchgate.net/profile/Helen-Louri/publication/339068458_Non-performing_loans_in_the_euro_area_Does_bank_market_power_matter/links/5e3bc67192851c7f7f2018d6/Non-performing-loans-in-the-euro-area-Does-bank-market-power-matter.pdf (accessed 12 Jun 2022).
Kozlovskyy, A. (2022), “Large NPL sale in Ukraine: why now and entry considerations - General NPL situation in Ukraine”, available at: https://home.kpmg/ua/en/home/media/press-releases/2022/02/large-npl-sale-in-ukraine-why-now-and-entry-considerations.html (accessed 13 August 2022)
Mirković, V., Knežević, M. (2014), “Non-performing loans resolution as essential factor of banking sector stability”, *FBIM Transactions, Vol.2 No. 2 pp. 224-234*
National bank of Moldova (2011),”Decission no.231 on approval of the Regulation on assets and conditional commitments classification,” *Official Monitor of the Republic of Moldova* no.216-221, Art.
National Bank of Serbia (2020), “Decision on Risk Management by Banks”, *RS Official Gazette*, Nos 45/2011, 94/2011, 119/2012, 123/2012, 23/2013 – other decision, 43/2013, 92/2013, 33/2015, 61/2015, 61/2016, 103/2016, 119/2017, 76/2018, 57/2019, 88/2019, 27/2020 and 67/2020 – other decision
National bank of Serbia (2020),”Covid -19- our response”, available at: https://nbs.rs/en/drugi-nivo-navigacije/pres/covid19/index.html (accessed 10 August 2022)
National Bank of Serbia (2022), “Decision on Capital Adequacy of Banks”, *RS Official Gazette*, Nos 103/2016, 103/2018, 88/2019, 67/2020, 98/2020, 137/2020, 59/2021 and 67/2022,
National bank of Serbia, (2015), “NPL resolution strategy”, *RS Official Gazette*, No. 72/15
National Bank of Serbia, (2019), “Decision on the Classification of Bank Balance Sheet Assets and Off-balance sheet items”, *RS Official Gazette*, Nos 94/2011, 57/2012, 123/2012, 43/2013, 113/2013, 135/2014, 25/2015, 38/2015, 61/2016, 69/2016, 91/2016, 101/2017, 114/2017, 103/2018 and 8/2019
National Bank of Ukraine (2017), “The National Bank of Ukraine’s New Approach to Defining Non-Performing Exposures/Loans”, available at: https://bank.gov.ua/admin_uploads/article/NPL_pr_2017-05-10_eng.pdf?v=4 (accessed 12 August 2022)
Ozili, P.K. (2019), “Non-performing loans and Financial Development: New Evidence”, *Journal of Risk Finance,* vol.20, no.1, pp.59-81

OTP bank Plc (2020),"Annual report 2020", available at: https://www.otpbank.hu/static/portal/sw/file/210416_Annual_report_032_e.pdf (accessed 10 July 2022)
OTP bank Plc (2021),"Annual report 2021", available at: https://www.otpbank.hu/static/portal/sw/file/220413_Annual_report_teljes_pdf_e.pdf (accessed 10 July 2022)
Preuss, P.,Flak,P.,Sikora, L., Warpas, M. (2020), "Management of non-performing loans", available at: https://assets.ey.com/content/dam/ey-sites/ey-com/pl_pl/article/biuletyn-ryzyka/ey-na-spotkaniu/npls-management.pdf (accessed 13 August 2022)
Republic of Albania (2018), "Economic Reform Programme", available at: https://neighbourhood-enlargement.ec.europa.eu/system/files/2019-04/albania_erp_2018-2020.pdf (accessed 10 August 2022)
Savjet Centralne banke Crne Gore (2021), "Odluka o minimalnim standardima za upravljanje rizicima u kreditnim institucijama",*Službeni list Crne Gore*, broj 134/21
The Central bank of Hungary (2021), "Financial stability report",availabe at: https://www.mnb.hu/letoltes/financial-stability-report-2021-june.pdf (accessed 2 July 2022)
The World Bank (2017), "Handbook for Effective Management and Workout of MSME NPLs", available at: https://www.bsi.si/en/publications/other-publications/handbook-for-msme-npl-management-and-workout (accessed 08 August 2022)
Vinh, N.T.H. (2017), "The impact of non-performing loans on bank profitability and lending behavior-Evidence from Vietnam", *Journal of Economic Development*, vol.24(3), pp. 27-44