Proceedings of the Faculty of Economics in East Sarajevo Year 2020, Issue 20, pp. 11-21

Received: 25th February 2020

UDC 336.74/.76:35.073.52(4-11) DOI: 10.7251/ZREFIS2020011L Original scientific paper

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# RETHINKING THE ROLE OF STATE IN ADDRESSING FINANCIAL DIFFICULTIES OF THE BANKING SECTORS IN EASTERN EUROPE

## ПРЕИСПИТИВАЊЕ УЛОГЕ ДРЖАВЕ У РЕШАВАЊУ ПРОБЛЕМА У БАНКАРСКОМ СЕКТОРУ У ИСТОЧНОЈ ЕВРОПИ

**Summary:** Financial problems in the banking sector have historically entailed significant government intervention and the allocation of significant funds for its rehabilitation. The recent financial crisis, manifested in Europe primarily as a banking crisis, reaffirmed the unwritten call of the state to intervene extensively to preserve economic and financial stability, but only for a set of old and developed EU Member States. The paper therefore analyzes the reformed role of the state in solving acute problems in transformed banking systems in Eastern Europe in the light of the post-crisis escalation of the volume of nonperforming loans. The focus of the role of the state was shifted from direct fiscal expenditures to raising the quality of the institutional environment and the rule of law, which enabled an impressive reduction in the rates of nonperforming loans. Foreign ownership in the banking sector has played a positive role because the financial backing of foreign subsidiaries has reduced potential fiscal costs on the one hand and on the other hand it contributed to maintaining confidence in the banking system.

**Keywords:** nonperforming loans, banking crisis

JEL classification: H81, G01

Резиме: Финансијски проблеми у банкарском сектору су историјски подразумевали значајну интервенцију и опредељивање значајних средстава за његову санацију. Последња финансијска криза, која се у Европи примарно манифестовала као банкарска криза, је потврдила неписану дужност државе да интервенише у великој мери како би очувала економску и финансијску стабилност, али само за скуп старих развијених земаља чланица Европске Уније. У раду се зато анализира реформисана улога државе у решавању акутних проблема у трансформисаним банкарским системима у Источној Европи у светлу посткризне ескалације обима проблематичних кредита. Тежиште улоге државе је са директних фискалних трошкова пренето на подизање квалитета институционалног окружења и владавину права, што је омогућило импозантно смањење стопа проблематичних кредита. Страно власништво у банкарском сектору је имало позитивну улогу јер је финансијско залеђе страних супсидијара са једне стране смањило потенцијалне фискалне трошкове, а са друге стране допринело очувању поверења у банкарски систем.

Кључне ријечи: проблематични кредити,

банкарска криза

JEL класификација: H81, G01

Paper presented at the 9th Scientific Conference with International Participation "Jahorina Business Forum 2020: Real and Financial Sector in the Light of New Technologies, New World Trends and New Challenges" Jahorina, 23-25th March 2020

### 1. INTRODUCTION

The banking sector in the countries of Eastern Europe (IE) has, historically, been under a high degree of state control. The influence of the state in almost all spheres of banking business was huge. which is why it is often said that these banking systems were under financial repression. Thanks to state ownership, which was often achieved through nationalization, the state had a monopoly not only over the entire banking sector but also over what would represent the financial sector as a whole, which differed from banking mainly only for the insurance sector.

Financial repression was manifested by the state managing the movement and levels of lending and deposit interest rates, influencing credit flows and the total quantity of loans, which was often jointly manifested through directing loans to certain sectors at subsidized interest rates. Due to problems with regulating the amount of money in circulation and high inflation, the required reserve

rate was high. There were market entry restrictions that only applied to the establishment of new domestic banks. These restrictions did not apply to foreign banks, as they were denied access anyway.

However, the 1990s and 2000s brought a major turnaround after the opening of the domestic banking market to foreign competition. The development of banking systems in IE has become crucially dependent on the capital, technology and know-how brought by foreign banks through their local subsidiaries. In parallel with the structural changes in the sector, the role of the state in the banking sector is being reconsidered.

This paper analyzes the reformed role of the state in solving acute problems in transformed banking systems in IE in the light of post-crisis escalation in the volume of nonperforming loans.

### 2. BANKING CRISES AND FISCAL EXPENSES

Deregulation and financial liberalization, as two pillars of the transitional transformation of banking systems in IE, were unconditionally considered positive forces that should increase the efficiency of the banking sector by accelerating competition and its expansion by loosening business barriers that hindered it. As expected, the state-owned banks had a hard time coping with the period of getting used to the new market conditions, often getting into trouble even before the privatization process would be completed, if planned at all. Due to their size, the financial problems of state-owned banks have produced milder or more severe forms of banking crises, although private domestic banks have also participated in deepening the crisis. The first crisis was recorded in Romania in 1990, then in Hungary in 1991, and then in Poland in 1992. In the Czech Republic and Bulgaria, the crisis occurred in 1996, and in Croatia and Slovakia in 1998.

There are two attitudes regarding dealing with banks that are arguably solvent. According to the first, banks that are insolvent should be treated like any other company that has experienced a financial collapse and let it go bankrupt. According to the second attitude, the potential of systemic effects arising from the bankruptcy of one or more banks causes major damage to the economic system, which justifies different degrees and forms of intervention in the banking system, such as deposit insurance or central bank last resort functions available to all banks, to direct state intervention and financial injections carried out at the individual level. In any case, any state intervention in the banking system entails certain costs that are an unpleasant burden for governments that record a fiscal deficit, which is the usual situation of governments in IE countries.

There is no uniform definition of the banking crisis, but in principle it can be said that there are two determinants:

- 1. Significant signs of financial difficulties in the banking system (such as depositors' attacks on banks, high losses and/or bankruptcies and liquidations of banks)
- 2. Significant intervention measures in the banking system that are a reaction to the large losses to which it is exposed.

Laeven and Valencia (2012) use a set of six intervention measures on the basis of which they assess whether the undertaken state intervention in response to financial problems in the banking sector can be considered significant, which means that it is then a banking crisis. According to them, if three of the following six measures are used, the condition for declaring a banking crisis is met: 1. extensive distribution of liquidity to the banking sector (i.e. if the amount of central bank claims on banks exceeds 5% of banks' deposits and liabilities to nonresidents); 2. gross bank rehabilitation costs of at least 3% of the country's GDP; 3. prominent nationalizations of banks; 4. issuing state guarantees on banks' liabilities (these may be all liabilities or only non-deposit liabilities, given that deposits are protected by the deposit insurance institute); 5. purchase of assets of the banking sector by the government or the central bank of at least 5% of the country's GDP and 6. freezing of deposit accounts and/or extraordinary non-working days of banks.

However, it happened in certain crises that the countries decided to combine a smaller number of measures, less than three, which in turn were extremely large in scope. For such cases, it is sufficient to meet only one criterion for the situation in the banking sector to be considered a banking crisis: a) The rate of nonperforming loans higher than 20% or the closure of banks whose share in the balance sheet of the banking sector is at least 20%; or b) fiscal costs remediation in excess of 5% of the country's GDP.

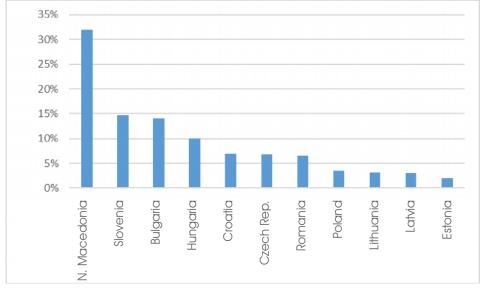


Figure 1. Costs of the banking crisis in Eastern European countries in transition (% of GDP)

Source: Laeven and Valencia 2018

Figure 1 shows the costs of the banking crisis of Eastern European countries in the transition period. The lowest were in the Baltic countries, where they did not exceed 3% of GDP, while the highest were in Northern Macedonia with 32%. The costs of the banking crisis include direct monetary expenditures arising from the state package of financial assistance for the banking sector. These expenditures are related to bank recapitalizations, activated state guarantees and other forms of cash flows from the state to the banking sector.

The starting point of all banking crises is a drastic decline in the quality of the loan portfolio. For the purposes of its monitoring, regulators ask banks to regularly classify credit receivables into several categories according to the degree of expected collection in the future.

In 2004, the International Monetary Fund prepared framework guidelines for regulators and supervisors of banking systems regarding the adequate way to classify credit claims into 5 categories according to the degree of credit risk and collectibility: 1. standard loans - where no servicing problems are observed or expected debt, 2. loans under intensified monitoring - which identify factors that may prospectively jeopardize the collectibility of loans if the debtor does not respond adequately to them, 3. substandard loans - the debtor is in arrears with loan repayment of over 90 days, repayment of the remaining debt is completely called into question because the collateral is not adequate, 4. disputed loans - the borrower is in arrears for more than 180 days and there are poor prospects for continued settlement of loan obligations and 5. loans with loss - definitely non-performing loans with arrears in repayment of principal and interest for more than one year.

In the application of any loan classification, it is optimal to use quantitative (number of days late) and qualitative criteria together (current financial condition of the client, the assessment of the loan officers who work with the client on the probability of proper loan repayment).

Combined loans from the last three categories form a special class of so-called nonperforming loans. It should be borne in mind that the classification of loans into a worse category does not have a permanent and final effect, i.e. that lowering a loan to a lower category is not irreversible. Also, the classification into the class of nonperforming loans should not be interpreted in the way that they are non-performing loans on the basis of which banks will certainly record a loss. If the bank has secured itself through collateral, the loan losses may not occur at all, even though the debtor has stopped repaying it. In an analogous way, loan losses can occur even though they have not previously been classified as nonperforming loans.

Not all countries have unconditionally adopted the IMF's recommended classification of credit claims. On the other hand, international accounting standards bodies have developed a scheme for impairment of loans and calculation of value adjustments based on rules set by them, which are not coordinated with the IMF definition. It is undeniable that the proper and timely recognition and provision of coverage for nonperforming loans is the core of preventing their occurrence and effective management.

In the domain of credit recognition, however, exceptional prudence is required, as often best wishes can produce counterproductive effects. Rapid downgrading of quality loans to lower categories of nonperforming loans in situations of unfavorable economic circumstances can upset the market and the public, which are prone to capricious reactions, and further aggravate the problem and deepen the crisis. This scenario is important in all countries, especially in developing countries. On the other hand, ignoring a more rigorous approach to credit classification leads to concealing the true state and scope of the problem, without which it is impossible to prepare adequate measures, and market and public suspicion according to official data produces an impact on their panic behavior that produces negative consequences.

In order to assess how problematic the loans are for the health and stability of the banking sector, several indicators have been developed, of which four stand out in terms of information. Available data from the balance sheet and income statement of the entire banking sector in the form of ratio are used for their calculation. These are: a) non-performing loans/total bank loans (gross amounts) b) net non-performing loans/regulatory capital c) value adjustments of non-performing loans/non-performing loans d) value adjustments of total loans/non-performing loans.

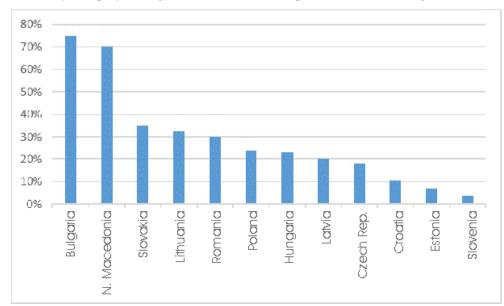


Figure 2. Rates of non-performing loans in Eastern European countries during the transition period

Source: Laeven and Valencia 2018

Figure 2 shows the scale of the problem with credit claims of impaired collectibility in IE countries in the transition period. In Bulgaria and Northern Macedonia, over 2/3 of the loan portfolio is assessed as difficult to collect, 75% and 70% respectively.

Table 1 shows the relative share of fiscal expenditures in GDP in the period before the global economic and financial crisis and during its duration for developed and developing countries. The median direct fiscal expenditure rose from 3.7% to 5.9% for developed countries, while it fell from 11.5% to 4.8% for developing countries. If we assume that developing countries grow at rates of 4% -5% per year, while developed countries grow at a rate of 2% - 2.5%, then to cover the costs of recent banking crises it took almost three times more time for developed countries than developing countries. The cost of the crisis for developing countries is a one-year increase in output.

Regarding the structure of fiscal costs in the last crisis, it can be noticed that it varies from country to country. Austria nationalized Hypo Alpe Adria Bank in 2009. The Netherlands and Belgium were also under strong pressure to resolve problems with their multinational banks, so the nationalizations of Fortis Bank and ABN-AMRO Bank were carried out. Some banks have been recapitalized with state capital, but have not been nationalized. These are KBC and Dexia in Belgium, ING and SNS in the Netherlands. Also, states bought portfolios of impaired loans and approved direct loans to banks. Slovenia is an interesting case because state aid to banks was implemented by its government issuing bonds and depositing all cash inflows based on them in the form of deposits in Slovenian banks. Although it has provided financial support to the banking sector, it cannot simply qualify as direct financial assistance, as the funds were not permanently invested in the bank (which happens with recapitalisations) nor did banks take on credit obligations to the state when granting loans to banks or selling bank bonds directly to the government).

Table 1. Costs of banking crises before and after the economic crisis of 2008

	Direct fiscal costs (median to % of GDP)	Public debt growth (median to % of GDP)
Banking crises in 1970-2006 period		
Developed countries	3,7%	36,2%
Developing countries	11,5%	12,7%
Average	10%	16,3%
Banking crises in 2007-2009 period		
Developed countries	5,9%	25,1%
Developing countries	4,8%	23,9%
Average	4,9%	23,9%

Source: Laeven and Valencia 2014

In addition to direct government expenditures on the financial sector, the costs of banking crises can be indirectly estimated through the growth of public debt over their duration. It is reasonable to assume that the state pursues a stimulating fiscal policy for the economy to support growth and employment that indirectly help to remedy problems in the banking sector as they affect the creditworthiness of debtors. The median growth of government debt in the last economic crisis for countries facing banking crises was 24%, which is 8 percentage points more than was the case in previous crises. Based on this criterion, the assessment of the costs of banking crises is less favorable than the one performed only on the basis of direct fiscal costs, the median of which seemingly halved from 10% (before 2006) to 5% (in the period of 2007-2009). Nevertheless, even this lower level of direct fiscal spending of 5% is considered alarming enough to upset the balance of public finances.

## 3. RESPONSE TO THE CRISIS OF NONPERFORMING LOANS IN EASTERN EUROPE CAUSED BY THE GLOBAL ECONOMIC AND FINANCIAL CRISIS

In order to assess the depth and uniqueness of the problem with nonperforming loans in IE, it is instructive to provide a comparison between countries. The slowdown in the global economy has ended a period of high growth rates in these countries. Klein (2013) finds that the level of nonperforming loans in IE countries can be attributed to both macroeconomic trends and bank-specific factors, with the latter having relatively low explanatory power. The level of nonperforming loans tends to grow when GDP falls, unemployment rises, the exchange rate depreciates and inflation is high. Recent papers confirm the conclusion that macroeconomic factors are the primary determinant of bank asset quality (Beck et al. 2013; Moinescu 2012; Jakubik and Reininger 2013; Vatansever and Hepsen 2013; Škarica 2014; Makri et al. 2014; Tanasković and Jandrić 2015; Kjosevski and Petrovski 2016).

Figure 3 shows that after the outbreak of the crisis, Serbia had the highest rate of nonperforming loans - 11.3%, while the Republic of Northern Macedonia was in second place, with a rate of 6.7%. Very soon, other countries began to catch up with Serbia in terms of their rates of nonperforming loans. The Lithuanian case is striking as the rate of non-performing loans rose from 6.1% to 24% in just one year after the crisis. In 2009, Serbia, Lithuania and Latvia had nonperforming loan rates of over 10%, to be followed in 2010 by six other countries. Without exception, all countries have to a greater or lesser extent encountered the acute problem of nonperforming loans. In terms of the level of non-performing loans, the case of Serbia can be compared to the cases of Lithuania, Romania and Albania.

30% 25% 20% 15% 10% 5% 0% SRB ALB ■ 2008 ■ 2009 ■ 2010 ■ 2011 ■ 2012 ■ 2013 ■ 2014 ■ 2015 ■ 2016 ■ 2017 ■ 2018

Figure 3. Trends in non-performing loans in Eastern European countries after the outbreak of the global economic crisis in 2008

Source: IMF 2019

Other European countries have faced similar and even more difficult problems. Cyprus and Greece have been battling bad bank assets for years. In 2015, the non-performing loan rate in Cyprus was 47.7%, while to date no solution has been found for non-performing loans that escalated in 2011. Greece has also been going through difficult times with its banking sector recording a non-performing loan rate of 45, 6% in 2017. On the other hand, there were countries that bypassed the problem with nonperforming loans - the Czech Republic, Slovakia, Poland and Estonia. It is interesting that both the Czech Republic and Poland had a small share of loans denominated in foreign currency in total loans, which did not exceed 30%.

In Figure 3, several common characteristics relating to the countries covered can be discerned. First and foremost, the influence of the foreign factor in the local banking sector, either directly through the ownership of foreign banks over the local bank, or indirectly through the characteristics of credit and deposit activity (loans indexed with a foreign exchange clause, foreign currency deposits) prevailed. It was expected that with the privatization of state-owned banks and the opening of the market to foreign banks in the transition period, foreign ownership in the banking sector would provide better banking service, more professional business and state-of-the-art technology. Also, a strong inflow of capital from abroad was expected through the subsidiaries of foreign banks in the country, which was supposed to be the financial basis for strong credit growth, in the absence of domestic sources of financing. However, a major mistake was often made in adjusting the local credit system to this inflow, which was in foreign currency, because locally approved loans were allowed to retain the denomination currency of that inflow after which loans with a currency clause supplanted loans denominated in local currencies. Effectively, with this solution, the banks formally hedged against foreign exchange risk, but the reality was that foreign exchange risk was actually incorporated into the credit risk of borrowers and that banks in one way or another remained exposed to it in unchanged manner.

When a country intends to join the euro area in the foreseeable future, this feature of the credit system should not have much effect on the emergence of nonperforming loans, as the local currency exchange rate is basically fixed in advance over a long period of time, in accordance with mandatory procedures and phases which are necessary to pass until the adoption of the euro. For example, it cannot be argued that exchange rate risk is responsible for the occurrence of nonperforming loans in Latvia or Lithuania. Bulgaria and Bosnia and Herzegovina have a currency board, while Slovenia joined the eurozone before the crisis, meaning that for all of them, exchange rate risk was out of the question as a potential cause of nonperforming loans.

However, for a group of countries that includes Serbia, Hungary, Romania and Albania, the depreciation of domestic currencies has affected the acceleration of nonperforming loans due to the high share of loans denominated in foreign currencies. Hungary has opted for a series of unconventional measures, some of which may have been in conflict with the principles of a free market economy, such as the conversion of foreign currency indexed loans into local currency loans with low interest rates. Matolcsi (2015) serves as a good reference to explain the measures taken.

In summary, banking systems facing the problem of nonperforming loans were characterized by: a) extremely rapid expansion of banks' balance sheets before the crisis fueled by a low interest rate environment in the euro area, b) inadequate preparedness and capacity of banks to manage nonperforming loans; has negatively affected the creditworthiness of companies from the real sector and d) the decline in the value of collateral - especially real estate (commercial and residential real estate) (Lukić et al. 2019).

140% 120% 100% 80% 60% 40% 20% 0% RiH BUG HR V MAĐ SMK **■**2010 **■**2011 **■**2012 **■**2013 **■**2014 **■**2015 **■**2016 **■**2017 **■**2018

Figure 4. Trends in value adjustments of non-performing loans in relation to non-performing loans in Eastern European countries after the outbreak of the global economic crisis in 2008

Source: IMF 2019

Figure 4 helps to conclude how well prepared the national banking systems were for nonperforming loans write-offs and whether banks paid enough attention in accounting terms to solving their problems on their own. It is important to compare the data on value adjustments of nonperforming loans with the data on their rate from Figure 3. Countries that show a relatively low coverage rate of nonperforming loans, and have a low rate of these loans, are less vulnerable in terms of financial stability. However, if a country were to combine a relatively high rate of nonperforming loans with a small degree of their coverage by value adjustments, it would imply its increased vulnerability in the event of a true escalation of the problem.

This was effectively the case in Serbia, which, with the exception of 2016, persistently had a rate of nonperforming loans above the average of the countries covered, and their coverage below the average. In 2015, the market share of non-performing loans in 18 countries of Central, Eastern and South-Eastern Europe (CESEE), calculated as gross non-performing loans in Serbia in relation to total gross non-performing loans in CESEE, was 9.3%, while the market share of Serbia's total loans in this region was only 3.3% (EBRD 2016).

The increased coverage rate registered in some countries is usually achieved by a decrease in the quantity of nonperforming loans, the so-called denominator effect, rather than allocating additional value adjustments which is considered a more cautious approach.

In general, most banks in the countries considered faced three choices for resolving nonperforming loans: a) debt restructuring, b) sale of receivables, and c) write-off of receivables. Restructuring of receivables implies recomposition of credit obligations of debtors and implementation of receivables collection measures (enforcement measures). There is no known optimal solution or formula for restructuring receivables in advance and banks must have a good strategy of nonperforming loans in order to choose the right option. Intuitively, banks are more inclined to keep a loan in balance sheets as long as there is some possibility to collect the remaining amount of debt. Restructuring receivables is uncertain and expensive for the bank. However, some statistics show, although they are related to the operations of banks in normal non-crisis times, that 60% of loans that fall due are repaid in a state of regular repayment within 90 days. As the 90-day deadline breaks, the probability and rate of loan recovery decreases significantly. That the situation in Serbia was very serious is evidenced by the fact that three quarters of nonperforming loans in April 2015 were in arrears for more than a year.

The sale of receivables is usually done by selling the loan directly to a third party. Because all the activities of collecting the nonperforming loan and the risks are transferred to the third aside, the bank must accept sales at a high discount. When loan collection is inefficient, loan recovery rates are low and there are no buyers interested in them, the bank is forced to write off receivables. In many cases, central banks regulate and/or motivate banks to make these write-offs.

No central bank or government has sidelined in tackling and seeking solutions for nonperforming loans, but in the recent crisis there has been a coordinated regional effort in IE countries to formulate a single platform with effective instruments that will be tailored to individual countries and that will give an optimal result. Patronage over the compilation of this platform belonged to the European Bank for Reconstruction and Development, which coordinates the "Vienna Initiative", which acts as a forum for collective action at the regional level.

We believe that the Strategy for Resolving Non-Performing Loans in Serbia is a representative example of the basic settings and key instruments that the regional platform for the recovery of banking systems in IE contained. The key priorities of the strategy were: 1. improving the capacity of banks to resolve non-performing loans, 2. providing conditions for the development of non-performing loans, 3. improving and encouraging out-of-court debt restructuring and 4. improving the framework for judicial debt and mortgage resolution.

The Strategy foresaw the intensive involvement of various state institutions. Among government ministries, the Ministry of Finance, the Ministry of Economy, the Ministry of Justice and the Ministry of Construction, Transport and Infrastructure made a significant contribution to the implementation of the Strategy. The National Bank of Serbia and the Deposit Insurance Agency, as institutions whose defined field of competence is the banking sector, were inevitably involved in the implementation of the Strategy. The contribution of all state institutions was to improve the regulatory framework and enforcement.

The concept of the Strategy highlighted the crucial importance of improving the quality of institutions and the institutional framework and ensuring the rule of law in resolving non-performing loans. The conclusions from the conference "Belgrade Initiative", which took place immediately before the adoption of the strategy, clearly stated that "solving non-performing loans must be financed by the private sector, while the public sector should provide support in the form of regulatory incentives."

The fact is that banks in Serbia lacked experience in restructuring over-indebted, but promising and business-sustainable companies, but it was also a fact that banks faced major legal and practical obstacles in resolving their non-performing loans. Banks along the entire IE were in a similar situation. While the credit crunch lasted in the 2000s, banks thought little about how to manage nonperforming loans when they arose, as the focus of the business was on gaining as much market share as possible.

The protection of creditors' rights was insufficient, which can be most clearly seen through the dysfunctional system of processing secured nonperforming loans. The procedure was slow with low recovery rates.

Creditors' rights have been compromised in a number of ways as a result of weak institutions. The execution system did not work well. Due to the overloading of the network of courts, the mortgage execution procedure was slow with the low quality of the procedure itself (court assessment of the value of property and organization of court auctions). The entry of a debtor on a late loan into bankruptcy proceedings has rarely had a positive outcome for both the debtor and the bank. The debtor in the procedure failed to consolidate the business, because he could not get the new financing that was necessary for him due to the weak protection for creditors under that financing. Secured creditors were often prevented from selling the pledged property, due to the way in which the person authorized for bankruptcy proceedings (bankruptcy trustee) decided how to manage the debtor's property, which meant postponing the sale. The bankruptcy framework did not have a prepared solution for managing the bankruptcy of a group of related companies with interdependent production activity and the intertwined role of guarantors and guarantors on financial obligations. In the bankruptcy procedure, in practice, no demarcation was provided that guarantees the independence of the judicial body from the bankruptcy trustee, which led to the neglect of the interests of creditors. With regard to the mortgage, unresolved legal relations slowed down the timely registration of the mortgage, which created legal uncertainty for mortgage creditors, and the same applied to the note on the activation of the mortgage. The entry of the latter note was significantly slowed down by the debtor, who was able to prolong it through legal proceedings over several years. A special problem was the impossibility of deleting lower-order mortgages after the mortgage sale, which the debtors had previously established over their pledged property, which completely discouraged potential buyers of the subject real estate.

Tax regulations were counterproductive. Banks were required to pay withholding tax on behalf of debtors when writing off debts from individuals (debt write-offs were tax-treated as a gift), and companies were subject to income tax on the amount of debt forgiven. In addition, the write-off of debts from legal entities could be recognized as an expense of banks for tax purposes only under rigorous conditions which included, among other things, court proceedings, the inefficiency and disadvantage of which was undisputed for the interests of creditors.

After three years of implementing the Strategy, from August 2015 to September 2018, impressive results were achieved. The volume of nonperforming loans decreased from 427 billion dinars to 141 billion dinars, which is a decrease of 67%. The rate of non-performing loans decreased from 21.6% (the maximum level was recorded in May 2015 from 23.2%) to 6.4%. The latest data from the third guarter of 2019 show that it was further reduced to 4.7%.

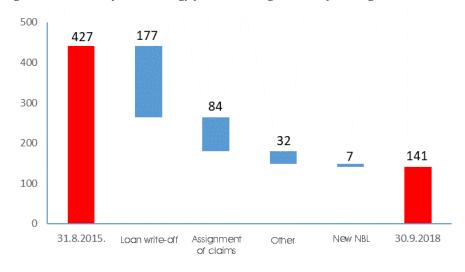


Figure 5: Results of the Strategy for Resolving Non-Performing Loans in Serbia

Source: NBS 2019

The reduction of non-performing loans was done through several main channels. The first in importance are loan write-offs, i.e. reversal of loans from the balance sheet and transfer to off-balance sheet records, and in three years the amount of write-offs reached 177 billion dinars. Loan write-offs intensified after the adoption of the Decision on accounting write-off of balance sheet assets of the National Bank of Serbia in August 2017, which required banks to write off all receivables that were fully corrected (100% coverage). In 2017, based on that, a write-off of 100 billion dinars was recorded. In the meantime, the write-off was recognized as an expense for tax purposes, which stimulated banks to implement it. It is important to emphasize that the write-off of loans to a significant extent can be performed only by banks that are solvent and financially sound. An important role here was played by the parent banks of Serbian subsidiaries, which remained committed to the Serbian market and with their financial capacity provided assurance that loan write-offs would not jeopardize the stability of operations. Although there is not enough reliable data on this, there are indications that some banks transferred the contaminated part of the loan portfolio to special purpose legal entities, backed by the parent banks. Through the purchase price of the portfolio in question, which would be higher than the real one, the parent banks could compensate for any excessive losses that the cleaning of assets from non-performing loans could produce.

The second most important channel was the assignment, i.e. sale, of receivables in the officially registered volume of 84 billion dinars. Thanks to the measures envisaged in the strategy, conditions were created for the development of the market of nonperforming loans, which did not even exist until then. This is a crucial contribution of the strategy not only to resolving the current crisis, but also to any subsequent one that may occur in the banking sector. In the global financial markets, there are specialized institutions that deal with the restructuring of operations and debts of companies in financial problems, but they were not present in Serbia. The fact that the parent banks of Serbian subsidiaries cooperated with them facilitated the launch of this market, because they could more easily animate potential investors in it, once the state set the institutional framework for its functioning. The amount of nonperforming loans traded on the secondary market is underestimated. Banks sold loans not only directly from the balance sheet, but also loans that were written off, i.e. recorded in offbalance sheet assets. That is why the size of the market of nonperforming loans was larger, so it is estimated that it was over twice as big and amounted to a total of 194 billion dinars. About 80% of buyers of non-performing loans were entities outside the banking sector. The market for nonperforming loans in Serbia is less transparent than in other IE countries, which means that data on the involved transactions are rarely publicly available, except in a few cases.

In addition to these two channels, there was a decline in nonperforming loans in the amount of 32 billion dinars, primarily based on the collection of receivables and debt restructuring.

#### 4. CONCLUSION

The way in which IE countries have dealt with a critically large volume of impaired credit claims in the post-crisis period has raised the question of re-examining the role of the state in resolving them. The focus of the role of the state has shifted from direct fiscal costs to raising the quality of the institutional environment and the rule of law, which has enabled an impressive reduction in nonperforming loan rates in all countries. Foreign ownership in the banking sector played a positive role because the financial background of foreign subsidiaries on the one hand reduced potential fiscal costs, and on the other hand contributed to maintaining confidence in the banking system.

In principle, the state abandoned the role of financier, and took on the role of facilitator in the venture to solve nonperforming loans. The development of the market of nonperforming loans, which came at the right time when interest rates in the eurozone began to enter the negative zone, and which motivated investors to seek higher returns elsewhere, laid the foundations for resolving future crises that may arise. However, as the previous global crisis has shown, once liquidity in markets disappears, only the state can provide it. Therefore, it cannot be definitively argued that the mere existence of nonperforming loan market will be sufficient to rehabilitate the banking sector, especially if it is made up almost exclusively of foreign financial institutions.

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