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Review Paper

NONPERFORMING LOANS AND FINANCIAL STABILITY – THE CASE OF SERBIA

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Abstract. *This paper investigates resilience and stability of the Serbian banking sector in the light of deteriorated quality of its credit portfolio since the last world economic crisis. Nonperforming loans became a burning issue across Eastern European region. We used a set of indicators to appraise the magnitude of nonperforming loans' burden to the banking sector's soundness. Indicators verify that the Serbian banking sector was robust and solvent throughout crisis. Nonperforming loans were concentrated in nonfinancial corporations' sector, while households sector performed much better, which influenced remedy measures undertaken. We carried out a comparison with peer countries and reviewed nonperforming loans resolution strategy implemented in Serbia. Our finding is that measures taken helped noticeably in reducing stock of nonperforming loans, with a caveat that reduction might have been too fast and too large so that bounce back effect cannot be excluded. Overall, financial stability has been preserved despite serious threats and without government financial aid.*

Key words: *banking sector, nonperforming loans, crisis management, financial stability*

JEL Classification: E42, E58, G21

1. INTRODUCTION

Central banks were commonly held responsible for maintaining price stability and legal norms referencing to this objective are incorporated in literally all national central banking laws. A global consensus on interpretation of price stability evolved, so it is defined as the rise in the general level of prices of around 2 per cent per annum, which is accomplished by vast majority of countries.

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Commencing in the middle of previous decade, the scope of central banks' responsibilities started to widen with financial stability becoming a relevant objective gaining increasingly in importance, especially after the financial turmoil. A survey on the central bank objectives stipulated in central bank laws revealed that objectives related to monetary policy were explicitly specified in all 47 central banks included in analysis, while ranked at a second place – with a share of somewhat less than a half of a sample, stood objectives related to financial stability, and with a share of less than a quarter employment, growth and welfare objectives and support policies of government objective were listed (BIS, 2009).

Opposite to the definition of monetary stability, there is still no uniform and easy way to understand definition of financial stability. European Central Bank (ECB, 2006) defines financial stability as a condition in which the financial system is capable of withstanding shocks and the unravelling of financial imbalances, thereby mitigating the likelihood of disruptions in the financial intermediation process which are severe enough to significantly impair the allocation of savings to profitable investment opportunities. Preceding definition enables vast interpretations as it may encompass many possible economic situations.

Primary negative implication of financial instability is linked to the occurrence of systemic risk. When an event is perceived as a shock that initiates a loss of confidence in a critical portion of financial system by market participants, it possesses power to create serious adverse effects on the real economy and loss of output. For example, Friedman and Schwartz (1963) argue that banking panics lead to the advent of financial instability due to the general public's loss of confidence in the banks' ability to convert deposits into cash money. Contraction of deposits follows that triggers cut in money supply and diminishing economic activity. Ćirović (2001) emphasizes the importance of systemic risk in banking in the form of a bankruptcy of one large bank that initiates chain process which negatively impacts banking and financial system. Besides, there are non-negligible chances of spillover effects from the banking system to the real economy.

The main issue for a banking sector, and root cause of financial and banking instability in general in bank-centric financial systems, are nonperforming loans. A nonperforming loan is a loan at which contractually defined payments from debtor to creditor are not met in full or in a due time. A nonperforming loan is more than just an indicator of a debtor's inability (or unwillingness) to pay, it is a burden for both the lender and the borrower (Balgova et al, 2016). Anastasiou et al. (2019) argue that high rate of NPLs may also cause expectations about the stability of the banking system to deteriorate, creating systemic risk that may in turn lead to a run on deposits, significantly reducing the intermediation power of banks.

2. Measures and Indicators of Nonperfoming Loans' Burden to Banking Sector

In order to assess the magnitude of nonperforming loans' burden to the banking sector's soundness, several indicators have been devised. They are based on accounting data contained in banks' balance sheet and profit and loss account. Most frequently used indicators are:

a) nonperforming loans to total loans
b) nonperforming loans net of provisions to (regulatory) capital
c) provisions for nonperforming loans to nonperforming loans
d) provisions for total loans to nonperforming loans

According to the International Monetary Fund (IMF, 2006) a loan should be classified as nonperforming when a) payments of principal and interest are past due by three months (90 days) or more, b) interest payments equal to three months (90 days) interest or more have been capitalized (reinvested into the principal amount), refinanced, or rolled over (payment has been delayed by agreement) or c) payments are less than 90 days past due but its status is envisaged by national regulatory rules, where “unlikely to pay” criterion has been usually pursued.

Behind “unlikely to pay” criterion may stand a variety of triggers that signal potential financial difficulties of the debtor. Such as: a) lawsuit against debtor in order to collect debt, b) multiple restructurings on one credit obligation, c) significant increase in overall leverage, d) loss of major customer, e) materially significant decrease of turnover/operating cash flow, f) fraud, g) negative or qualified opinion of auditor, h) file for bankruptcy etc. (ECB, 2017).

Importantly, the amount of loan recorded as nonperforming should be the gross value of the loan as recorded on the balance sheet, not just the amount that is overdue.

Nonperforming loans to total loans is a general indicator and the best available measure of the credit portfolio quality as it shows the share of potentially uncollectible loans to total loans. This indicator is backward looking and summarizes errors of the past credit activity. It is also a lagging indicator due to the time elapsing between nonpayment of loan obligation and its classification as nonperforming. High value of indicator signals credit portfolio of bad quality, while its stable and low value is a sign of well performing portfolio. The strong pace of growth of this indicator in successive time periods may be alarming, suggesting that individual bank or banking sector is losing control over credit portfolio. It is expected to follow the pattern of nonfinancial corporations’ financial standing and overall economic conditions in a country.

As with subsequent indicators, its informative power is dependent upon the appropriate recognition of nonperforming loans. Data on nonperforming loans are essential for creating a realistic and reliable picture of banking sector financial soundness, which sometimes can be compromised particularly at the level of individual banks facing financial strains. The bank may underestimate the actual deterioration in credit quality, such as in the case of evergreen loans.

For analytical purposes, this indicator ought to be calculated for each institutional sector (nonfinancial corporations, households etc.) allowing for a disaggregated view on the credit portfolio quality. In addition, loans to nonfinancial corporations should be further differentiated according to debtor’s core economic sector and indicator in question compiled accordingly by comparing nonperforming loans to total loans for these core sectors. The corporate sector is a key channel through which shocks affect banking sector with change in its leverage ratio having significant impact on banks’ credit portfolio quality with a one year time lag (IMF, 2003).

Second indicator - nonperforming loans net of provisions to capital – indicates whether bank capital is enough to withstand loan losses stemming from credit exposures that are yet to be written off. Technically, if in any single bank loan losses outweigh capital, the bank is insolvent.

Two considerations need to be clarified in relation to this indicator. First, it would be an exaggeration to claim that a whole amount of nonperforming loans would need to be backed up by bank capital, meaning that recovery rate on these loans would be zero. Banks employ a number of techniques to mitigate credit risk, starting with an adequate collateral and guarantees, due to which as a rule actual loan losses are lower than maximum projected loss. Major drawback is that the appraisal of recovery rates is immensely uncertain. Secondly, provisioning policy determines when and how much banks should provision against nonperforming loans. Loan loss provisions reduce the gross amount of the accompanying loan in the balance sheet so as to calculate its net value, and are often referred to as specific loan loss provisions. Net value of a loan is the best guess a bank can make about loan amount it expects to collect from debtor and reflects the loss in value of impaired assets.

Provisioning is set in a progressive way so as to attribute higher percentage of provisions to loans with a higher likelihood of default and expected loss. Formation of specific provisions reduces profit in the respective period and their outstanding amount accumulates through time if the riskiness of the loan rises. The higher specific provisions against an individual loan or collectively assessed group of loans, the less impact will nonperforming loans have on bank capital. Loss provisions serve as a buffer against diminishing level of bank capital.

Low levels of ratio of nonperforming loans net of provisions to capital point to a resilient and solvent banking sector. On the other hand, high levels of ratio indicate inadequate provisioning policy that allowed banks to delay addressing problem with nonperforming loans which grew over time.

Provisions for nonperforming loans to nonperforming loans provide a measure of the portion of bad loans for which provisions have already been set aside. It is directly related to the numerator of the previous indicator, since it uses the same accounting data. Often it is referred to as coverage ratio. When coverage ratio reaches one hundred percent, the net value of nonperforming loan is zero, and it can be completely written off without any bad repercussions to bank capital or financial result in the current reporting period.

Finally, the last indicator depicts the total capacity of provisions to cover nonperforming loans losses. In most instances, actual value of provisions for total loans to nonperforming loans ratio is very close to provisions for nonperforming loans to nonperforming loans ratio, because provisions for collectible loans are low and usually in the range 0,25-1%.

Živković et al (2018) provide review of additional indicators of bank assets quality.

3. OVERVIEW OF NONPERFORMING LOANS IN SERBIA

In 2014 Serbia ranked 7th worldwide according to the nonperforming loans to total loans ratio. This fact signaled a need for active measures to reduce the stock of nonperforming loans.

Data on nonperforming loans in banking sector is available as of September 2008, when an official definition concerning them was issued by National bank of Serbia (NBS) and first data gathered. NBS adopted the definition from the IMF. Figure 1 displays stock of nonperforming loans to total loans and regulatory capital. Right from the beginning of collecting data for nonperforming loans, a gap between the two ratios has started widening. While ratio of nonperforming loans to total loans doubled in five years, ratio of nonperforming loans to regulatory capital more than tripled, creating stress for both banks and the NBS. Despite adverse developments in the two ratios, capital adequacy of the banking sector, measured by regulatory capital to risk-weighted assets, stayed strong during the period featuring most acute problems with nonperforming loans - 2009-2014.

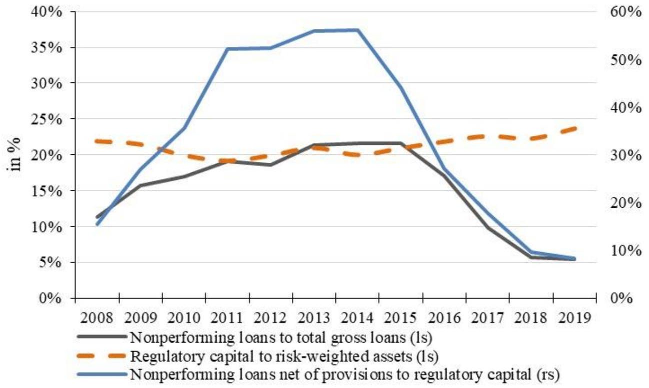

Fig. 1 Nonperforming loans vs. regulatory capital and gross loans
Source: Authors' presentation based on data from NBS

Apart from NBS data, Association of Serbian Banks has been gathering data on bank clients` indebtedness and arrears from the establishment of Credit Bureau in 2004. Its data base is accurate, reliable and daily updated and may serve as a cross check vis-a-vis NBS data, while it is especially important for analyzing bad loans data prior to 2008. Credit Bureau publishes monthly information on the share of defaults (arrears) in credit debt - classified by the type of the borrower: a) legal entities (companies), b) entrepreneurs and c) individuals (natural persons). Credit reports became available for individuals in October 2004, and for companies and entrepreneurs from May 2006.

Credit Bureau follows clear-cut rules for defining default on outstanding debt. For legal entities and entrepreneurs any debt repayment that has not been cleared in 15 days after due date is to be classified as default, while for individuals that period is extended to 60 days.

Figure 2 displays data available from Credit Bureau. The share of defaults in credit debt for individuals (households) has never entered double digit zone. Developments in total share of defaults in credit debt were predominantly influenced by nonfinancial corporation sector, which can be explained by the leading role of this sector in total bank loan volume and high level of defaults observed in it.

When comparing Figure 1 with Figure 2, one can observe that ratio of nonperforming loans to total loans is consistently above share of defaults in credit debt, in the range 5-9 percentage point, for the period up to 2016. This discrepancy comes from methodological differences in computing respective ratios, where first ratio includes in the numerator total unpaid amount of principal on the loan of which at least one installment is overdue, while second ratio takes into account only amount actually in default, i.e. only after repayment end date total principal would be included in the numerator. For short-term loans this difference does not make a big effect, while opposite is true when longer term loans are in question where in the first half of the repayment period only small fraction of principal is repaid.

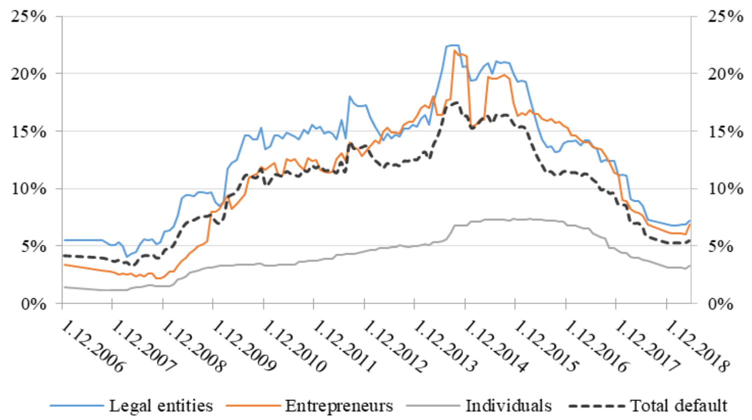

Fig. 2 Share of defaults in credit debt
Source: Authors' presentation based on data from the Association of Serbian Banks

Analysis of nonperforming loans of nonfinancial corporations provides insight about what economic sectors financial and economic crisis has been affecting the most. In 2010 more than 75% of total nonperforming loans were related to companies, either ongoing entities or entities that filed for bankruptcy. Figure 3 depicts developments of portions of nonperforming loans in each economic sectors in total companies' nonperforming loans.

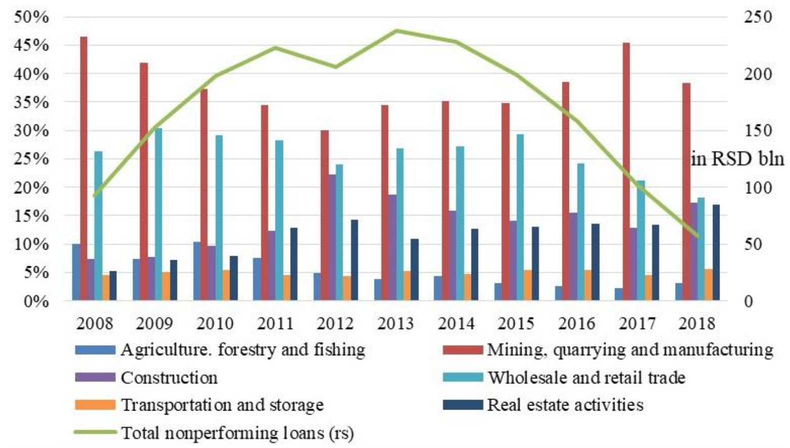

Fig. 3 Composition of nonperforming loans of nonfinancial corporations by economic sector (% of absolute amounts)
Source: Authors' presentation based on data from NBS

The bulk of the problem with nonperforming loans in absolute terms is linked to mining, quarrying and manufacturing, and wholesale and retail trade sectors. However, the same situation occurs in normal times since these sectors dominate with highest economic activity and loan volume. Thereby, an adequate measure of economic standing in each sector, and conditions for doing business in it in the course of time, is ratio of nonperforming loans to total loans in each sector.

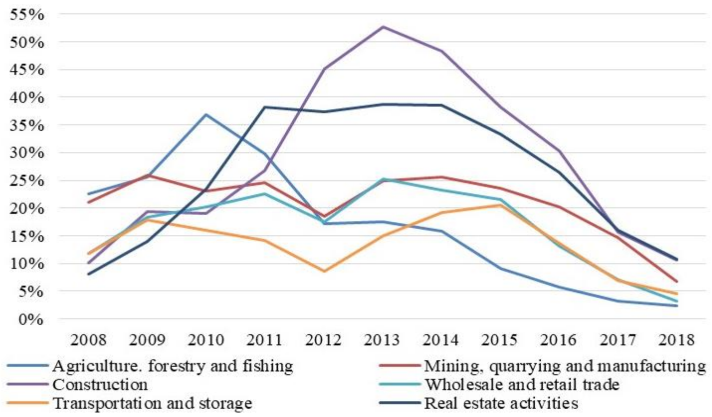

Fig. 4 Nonperforming loans rates across economic sectors
Source: Authors' presentation based on data from NBS

Figure 4 illustrates that already at the outset of crisis the ratio of nonperforming loans was over 20% in agriculture, forestry and fishing, and mining, quarrying and manufacturing. In the first two years of crisis, real estate activities (comprising also professional, scientific, innovation and technical activities, administrative and support services, other services, art and entertainment) and agriculture, forestry and fishing lead in negative reaction to unfavorable economic environment. Companies operating in these sectors were facing immense financial difficulties, so default rates rose sharply. Interestingly, default rates peaked in 2010 for agriculture, forestry and fishing, and have exhibited declining trend ever since. On the opposite side, from 2010 default rates in construction sector escalated, so in general this sector performed the worst during crisis period together with real estate activity sector. The culmination of problem occurred in 2013 when more than a half of outstanding loans in construction were nonperforming. As for other sectors, their nonperforming loan rates varied in a narrower range; while mining, quarrying and manufacturing as the holder of the largest part of outstanding loans recorded peak rather early - in 2009.

Households sector is also important for banks and it can be observed from Figure 2 that it performed much better than nonfinancial corporations in terms of default rates. Nonperforming loans ratio of natural persons' loans stayed below average due to the low ratio for housing loans that have consistently accounted for close to one half of total loans. However, nonperforming loans have been steadily increasing from 2008 with amount of 19,8 billion dinars, up until 2015 when they reached maximum of 88,2 billion dinars. Figure 5 shows developments in level and structure of natural persons' nonperforming loans.

Nonperforming cash and housing loans have commonly represented the predominant bulk of total nonperforming loans in Serbia. The participation of loans for other (business) activities and other loans, two rather heterogeneous categories of loans, rose immensely during crisis years in the composition of nonperforming loans since both posted a double digit share. Thereby, these loans inter alia determined developments of overall nonperforming loans in household sector.

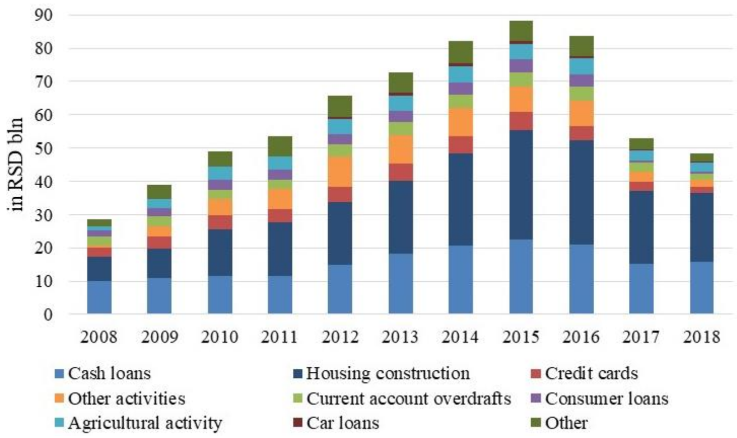

Fig. 5 Composition and level of natural persons' nonperforming loans
Source: Authors' presentation based on data from NBS

More detailed analysis of common types of natural persons' loans reveals some interesting findings. First, ratio of nonperforming loans for cash loans fluctuated unpredictably in a narrow band (9,3%-11,3%) in 2008-2015 time frame, implying that crisis on average did not influence performance of this type of loan. Second, one may observe pattern in movement of ratio of nonperforming loans for housing loans that is in line with appreciation of Swiss franc against euro. There were two episodes of appreciation – a) 2010-2011 and b.) one-off shock in 2015. Ratio of nonperforming loans increased in both episodes, because of strong adverse impact on Swiss franc indexed housing loans, while lagged effect of appreciation with smaller magnitude can be also observed. Due to favorable interest rates on housing loans indexed in Swiss franc before the crisis, 22 709 loans out of outstanding 85 676 housing loans in 2011 were denominated in it, i.e. more than a quarter of all housing loans. At the same time, and even more striking, they accounted for 37% of outstanding debt on housing loans. Third, ratio of nonperforming loans for consumer loans all the way to 2012 was exhibiting downward trend, when it sharply surged upward. In 2014, ratio equaled 28,5% which set consumer loans at the top of list of all type of loans according to the ratio concerned. Since 2012, consumer loans have had the highest ratio among common types of natural persons' loans. Fourth, although credit cards loans and current account overdrafts seemingly look like close substitutes, since both act as pre-approved credits, their ratios of nonperforming loans had different dynamics in observed period. Ratio for current account overdrafts was already high in 2008 – 14,8%, also the highest in all loan categories, but it did not change a lot in the following period during which it moved both up and down. Contrary, ratio for credit cards loans was 6,1% in the same year and followed continually increasing path, made height in 2014 with 14,3%, but has never surpassed respective ratio for current account overdrafts. Fifth and finally, car loans entered loan statistics as a distinct type of loan in 2012 and ever since have kept status as a type of loan with the least ratio of nonperforming loans. For many reasons, this fact seems illogical, since one does not commonly expect users of car loans to behave in such a prudent manner.

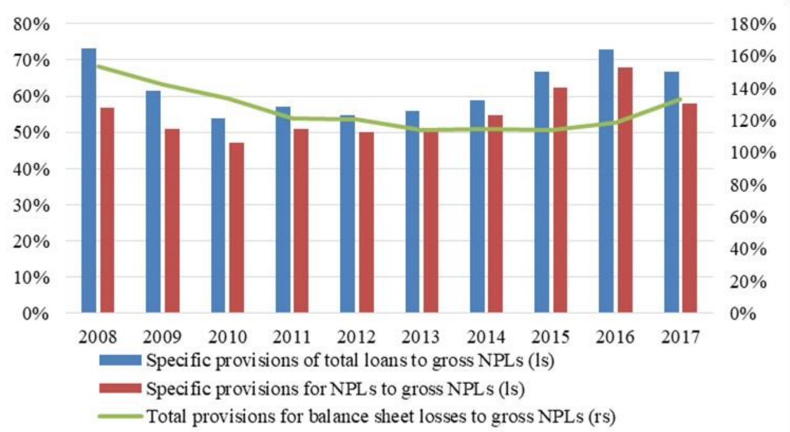

Fig. 6 Provisions for nonperforming loans
Source: Authors' presentation based on data from NBS

Figure 6 displays three indicators related to nonperforming loans coverage. Up to 2014, the coverage through regular accounting provisions was below pre-crisis level, still acceptable. It rose only when banks became exposed to NBS measures that stimulated write-offs and more realistic provisioning. However, regulatory provisions prescribed by NBS were markedly higher than accounting ones, which created an image of adequately capitalized banking sector even under the worst case scenarios. Regulatory provisions hence played an important role in preserving financial stability.

4. Case of Serbia Against Other Nonperforming Loans Cases in Emerging Europe Since the Last World Economic Crisis

In order to assess the depth and uniqueness of the problem with nonperforming loans in Serbia, some cross country comparison covering period since the last world economic crisis with similar European countries is deemed instrumental. A group of countries from Central and Eastern Europe represents a natural benchmark.

The global economic slowdown ended period of high growth rates in these countries. Klein (2013) finds that the level of nonperforming loans in countries considered can be attributed to both macroeconomic conditions and banks` specific factors, with the latter having a relatively low explanatory power. The level of nonperfoming loans tends to increase when GDP falls, unemployment rises, exchange rate depreciates, and inflation is high. A vast recent literature confirms finding that macroeconomic factors are primary determinant of the quality of banks` assets (Beck et al., 2013, Moinescu, 2012, Jakubik & Reininger, 2013, Vatansever & Hepsen, 2013, Škarica, 2014, Makri et al. 2014, Tanasković & Jandrić, 2015, Kjosevski & Petrovski, 2016).

Figure 7 shows that at the outbreak of the crisis Serbia has already had the highest ratio of nonperforming loans – 11,3%, whilst ranked second was the Republic of North Macedonia with ratio of 6,7%. Very quickly other countries started to catch up with Serbia. Lithuanian case is striking since NPL ratio rose from 6,1% to 24% in just a year after the crisis. In 2009, Serbia, Lithuania and Latvia had NPL ratio over 10%, to be accompanied by six other countries in 2010.

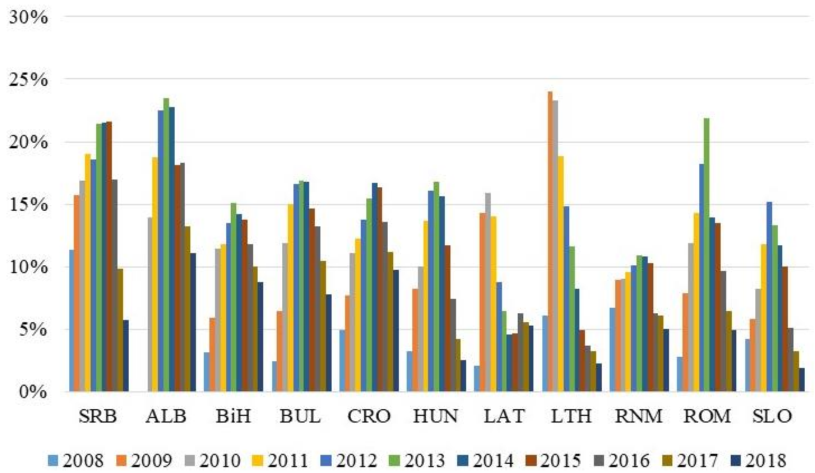

Fig. 7 Bank nonperforming loans to total loans across countries
Source: Authors' presentation based on data from IMF FSIs

Without exception all countries encountered, to bigger or smaller extent, the issue of nonperforming loans. In terms of the level of nonperforming loans, the case of Serbia can be compared to Lithuania, Romania and Albania cases. Other European countries faced similar, and even more severe problems. Cyprus and Greece have been struggling with bad banks' assets for years. In 2015 reported NPLs ratio in Cyprus was 47,7%, while as of today it did not succeed in resolving nonperforming loans issue that escalated in 2011. Greece has been also undergoing difficult times with its banking sector that posted NPLs ratio of 45,6% in 2017. On the other hand, there were countries that have circumvented nonperforming loans issue – Czech Republic, Slovakia, Poland and Estonia. Interestingly, both Czech Republic and Poland have been having low share of foreign currency denominated loans that has not exceeded 30%.

Several joint features may be discerned concerning countries from Figure 7. First and foremost, foreign component in the banking sector, either directly over the bank ownership, or indirectly through properties of regular operations, was overwhelming. Foreign ownership in banking sector was expected to provide better banking, more professional conduct and state of the art technology and practice. Also, a sizeable foreign funding was expected to inflow in countries through foreign subsidiaries that would set ground for strong credit growth. However, a detrimental omission has been made since these funding came in foreign currency denominations and whole credit system has been adapted so as to local loans kept the denomination of funding currency. Otherwise, banks could have been exposed to heavy exchange rate risk.

When a country intends to join the euro area in a foreseeable future, this property should not make a large effect in terms of nonperforming loans emergence, since exchange rate is basically fixed up-front for a considerable time span according to mandatory procedure and phases that lead to euro adoption. For example, one cannot argue that exchange rate risk is accountable for Latvia or Lithuania case of nonperforming loans. Bulgaria and Bosnia and Herzegovina have a currency board, while Slovenia joined euro area prior the crisis, meaning for all of them exchange rate risk was out of consideration as a potential cause of nonperforming loans.

However, for a group of countries encompassing Serbia, Hungary, Romania and Albania, currency depreciation impacted on acceleration of nonperforming loans stock due to the high share of foreign currency denominated loans. Hungary opted for a set of unconventional measures, some of which might have been in a collision with principles of a free market economy, such as the conversion of foreign currency indexed loans into local currency loans with low interest rates. Matolcsy (2015) serves as a good reference for the explanation of measures taken.

In sum, we distinguish several additional properties for all banking systems: a) an extremely rapid expansion of balance sheets of banks prior to the crisis fueled by low interest rate environment in euro area, b) the inadequacy of banks` preparedness and capability to deal with nonperforming loans, c) the economic downturn negatively impacting real sector companies and d) a drop in real estate collateral values (both commercial and residential).

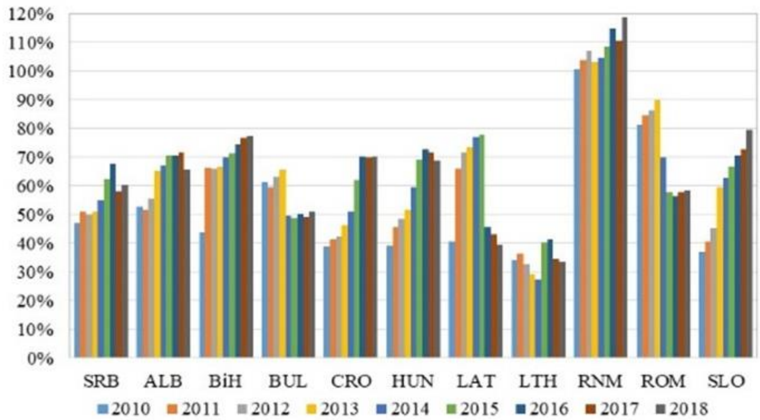

Fig. 8 Bank provisions to nonperforming loans across countries
Source: Authors' presentation based on data from IMF GFSR

Figure 8 helps infer how well prepared were national banking sectors for bad loans write-offs, and whether banks in accounting sense paid enough attention to addressing nonperforming loans issue internally. It is meaningful to match data on provisions to nonperforming loans with data on NPL ratio from Figure 7. Countries that demonstrate relatively low coverage ratio but also have low NPL ratio are less vulnerable in terms of financial stability. However, if a country posted relatively high NPL ratio with low coverage ratio, it would imply its heightened vulnerability.

This was effectively the case of Serbia which, with the exception of 2016, persistently had NPL ratio above the average of countries considered, and coverage ratio below average. In 2015, Serbia NPLs market share in 18 countries of Central, Eastern and South Eastern Europe (CESEE), calculated as Serbia gross NPLs divided by total CESEE gross NPLs, was 9,3%, while its market share in total loans outstanding was only 3,3% (EBRD, 2016).

A rise in coverage ratio observed for some countries was usually accomplished by a drop in nonperforming loans stock, i.e. denominator effect, opposite to build-up of additional specific loan loss provisions which is considered more prudent.

In general, before the majority of banks in troubled countries there stood three choices for dealing with NPLs: a) workout, b) sale and c) write-offs. Workout comprises measures aimed at restructuring credit obligation or legal collection efforts. There is no predetermined optimal solution and banks need to have good NPLs strategy in place so as to choose the right option. Intuitively, banks would prefer to keep loan on balance sheets as long as there exists some chance to collect unpaid principal. Workout is highly uncertain and costly. Some statistics show however that, albeit in normal circumstances, 60% of overdue loans are repaid within 90 days. With surpassing 90-day criterion the probability and the amount of recovery decline significantly (IFC, 2011). For example, three quarters of nonperforming loans in Serbia in April 2015 were overdue for more than a year (MoF, 2015).

Sale is commonly performed through outright sale of a loan to a third party. Since all collection activities with troubled loans are transferred to a third party, bank must accept sale at a discount. Finally, with anticipated inefficient loan collection, poor recovery amount or absence of interested buyers, bank should choose loan write-off. In many cases, central banks instruct and/or motivate banks to carry out write-offs. In dealing with huge stock of nonperforming loans, no central bank can keep aside and each country in CESEE with bad loans problems sought for assistance from reputed international institutions. In the next section, we will describe major measures implemented in Serbia.

5. Strategy and Measures for Resolving Nonperforming Loans Issue in Serbia

NBS finally made decisive coordinated move with other relevant institutions in order to counter NPL issue in 2015. Some minor measures have already been undertaken in late 2012 when NBS loosened regulatory impediments to the sale of NPLs, by allowing banks to assign due corporate loans to either another bank or another legal entity (private equity fund, special purpose vehicle etc.). In addition, new rules governing classification of bank assets were issued regarding the restructuring of receivables from entities participating in the voluntary financial restructuring schemes. Banks were given the opportunity to reset calculated number of days in arrears on receivables that were restructured, effectively to zero, according to the scheme mentioned above. The results of these measures were poor.

The turnaround point was August 2015 when the Government of the Republic of Serbia adopted a comprehensive NPL Resolution Strategy (NPLRS) involving relevant Ministries and NBS, and defined Action plan for its implementation. NPLRS was developed around four pillars: a) enhancing banks' capacity to deal with NPLs, b) enabling conditions for development of secondary market for NPLs, c) improving and incentivizing out-of-court debt restructuring and d) enhancing in-court debt resolution and mortgage framework.

NBS on its part has enhanced the regulatory framework for the treatment of restructured receivables that prevents unsustainable refinancing practices. It required banks to set up an independent unit whose task would be to deal with nonperforming loans. A large weight has been put onto proper implementation of accounting standards, with particular emphasis to IAS 39 that defines methods of recognition of impairment of receivables in banks` balance sheets, and promotion of the best practice related to write-off policies that banks implemented and cautious recognition of interest on NPLs. NBS revealed expectation to banks about enhanced public disclosure of banks regarding data on assets quality, coupled with better reporting to NBS related to collaterals, accrued interest and largest exposures. As a result, banks became obliged to prepare and submit new forms of reports, whereas NBS established a database of valuations of real estate that was used as collateral for loans and of loans that are collateralized with respective real estates. NBS was thus enabled to monitor indicators such as loan to value (LTV) and debt service to income (DSTI) due to data from the established database. Overall, a lot of emphasis has been put to collateral management, since the crisis revealed that appraised collateral value was far above its sale price when banks used this method of debt collection. Thereby, NBS prescribed in provisions the frequency of collateral valuation on every three years.

Despite earlier NBS measures aimed at emergence of secondary market for NPLs it remained underdeveloped. Neither were banks willing to sell these loans, nor there existed demand for them reflected in interested investors. Main impediments on banks' side were related to taxation matters, inadequate loan loss provisioning and collateral valuation. Provisions for tax recognition of write-offs of corporate receivables as expenditures were excessively strict – providing hard evidence on collection actions. In addition, write-offs of receivables were treated as debt release (exposing debtors to additional tax cost equal to 2,5%), and even over that write-offs in cases of natural persons had treatment of private income (exposing banks to effective rate of personal income tax equal to 16%). Altogether, it turned out banks were exposed to additional tax costs that amplified original bad debt burden.

With amendments to existing laws and related by-laws, tax incentives have been adjusted with the needs of NPL market. Obstacle related to the inability of NPL buyer to take over an ongoing litigation proceedings, instead of commencing new proceedings, was successfully overcome by changes in the Civil Procedure Law. Hurdle linked to banking data secrecy that prevented transfer of data on debtors with debt in arrears to third parties was solved by additional interpretation of the Banking Law issued by NBS.

Table 1 Sale of nonperforming loans portfolio in Serbia (publicly available data)

Year	Seller	Type	Buyer	Buyer country	Face value (mil €)
2015	Erste Bank	Corporate	APS Holding	Czech Republic	21
2015	Banca Intesa	SME	Confidential	N/A	35
2017	HETA Asset Resolution	Commercial Real Estate	Undisclosed	N/A	289
2017	Pireus Bank	Corporate/SME	Confidential	N/A	43
2018	Nova Ljubljanska banka (NLB)	REO (Real Estate Owned)	Undisclosed	N/A	115
2018	Undisclosed	Undisclosed	Undisclosed	Undisclosed	74

Source: EBRD NPL Monitor

Measures implemented finally helped NPL market development. In Table 1 is given a list of transactions, based on publicly available data, that occurred since the adoption of NPLRS. In comparison to other NPL markets in CESEE, Serbian market seems incomparably more opaque. It is rather a rule than an exemption that the identity of buyer is kept confidential or undisclosed. EBRD data shows that 5 out of 18 registered NPL servicers in CESEE region are in fact active in Serbia. In addition, Deposit Insurance

Agency (DIA) has carried out its first auction for the sale of the NPL portfolio with notional value of 242 mil € that was completed in February 2019. Total NPL portfolio under management of DIA amounts close to 1 billion € (IMF, 2018), that makes it the biggest NPLs holder in Serbia.

The third and fourth pillar of NPLRS are essentially related to the strengthening of protection of creditor rights. Current legal system performed poorly in terms of assisting creditors to collect due debt. However, professional investors specialized in restructuring of bad assets, buyers of NPL portfolios, are critically interested in reliance and speed of legal proceedings that will enable them to pursue their strategy of recovering bad debts.

A consensual financial restructuring is a conduit for the implementation of out-of-court debt restructuring. In practice, a general assessment was that restructuring plans agreed previously underperformed the expectations, since rarely these plans ended with viable operations of troubled debtors – a success rate of below 30%. Alike banks, state creditors were quite inexperienced with formulating restructuring plans, which in some cases brought prospective plans to a halt.

Special type of a problem with in-court debt resolution stemmed from corporate groups` NPLs that accounted for a significant part of total NPLs (ex. Farmakom, Beohemija), since the Insolvency Act recognized debtor as an individual company and not as a part of corporate group comprised of connected companies. It meant that separate legal proceedings needed to be filed for every company and sometimes it involved separate local courts, which proved to be highly inefficient. Provisions related to fostering secured creditors` rights, swift disposal of assets where assets are not important for reorganization and protection of creditors that provide new financing in reorganization have been adopted. The capacities of bankruptcy administrators and Commercial Courts were strengthened, mechanism of tracking and supervising ongoing bankruptcy cases launched with their transparency increased. Finally, a lot of work has been invested in the field of the enforcement of mortgages, where particular problems arose with second-instance decision process for land registry case files where a significant backlog of cases has been formed.

Legal framework surrounding nonperforming loans was thus improved and streamlined in order to counter potential losses for creditors by, *inter alia*, following changes: a) Amendments to the Corporate Insolvency Law, b) Law on Real Estate Appraisers, c) Law on Enforcement and Security, d) Law on Consensual Financial Restructuring, e) Amendments to the Mortgage Act and f) Amendments to the Banking Act.

NPLRS with its comprehensive approach delivered measurable effects. In a three-year period starting from the adoption of NPLRS, stock of NPLs has been reduced from 427 to 141 billion RSD. An impressive fall in NPLs was mainly attributed to write-offs and sale of NPLs (to the parties outside of banking sector), 177 and 84 billion RSD respectively. Besides selling on balance sheet assets, banks have equally sold their off-balance sheet items (loans previously written off). In the observed period, the value of NPL market transactions was estimated at 194 billion RSD. Pursuant to positive developments abovementioned, NPL ratio dropped from 21,6% to 6,4% in the respective time span.

6. CONCLUSION

Nonperforming loans are a natural ingredient of banking business. However, excessive level of nonperforming loans threatens financial stability. Last time when Serbia was confronted with widespread NPL problems, it closed four largest banks. Current NPL crisis was the first crisis of that kind in the post-transition era in Serbia, interestingly four banks were also closed during it. A combination of fairly relaxed lending criteria, economic misfortune and numerous faults in legal and accounting framework brought about NPL burden to the surface.

Despite the mandate of preserving financial stability given to the NBS, analysis above shows that instruments at its disposal were not enough to solve NPL issue on its own. In addition, NBS reacted to emerging crisis with a notable time lag. Judicial system, in all its aspects, proved to be more of a bottleneck than accelerator in tackling with NPL crisis.

Key lessons learned from the case of Serbia in coping with NPL issue can be summarized as follows: a) regulators need to prepare the setting for and encourage the clean-up of banks` balance sheets in a timely manner, b) banks need to proactively approach the potential building up of NPLs and professionalize NPL management, c) adequate tax, insolvency and enforcement frameworks must be in place together with efficient out-of-court restructuring practices and d) ultimate disposal of toxic assets is dependent upon the existence of secondary market in NPLs. To some extent, these lessons were reaffirmed in other CESEE countries.

As a positive, Serbian resolution of NPLs did not draw on utilizing public finances and government budget directly. However, as DIA manages the largest stock of NPLs and its funds were used for paying off insured deposits of closed banks, public funds have been engaged indirectly, which should be taken into consideration.

Indicators considered in analysis verify that Serbian banking sector as a whole, even with high level of NPL ratio, was robust and solvent throughout crisis, since provisions for loan losses and capital adequacy were significantly above critical zone. No systematically important bank was in a need for capital injection, though some banks were winded up.

Two external macroeconomic factors played an important role in relieving debtors of debt burden and reducing NPLs. First, loose monetary policy of cheap money and negative interest rates of ECB, and second, appreciation of RSD versus euro during implementation of NPLRS.

There exist some doubts whether a drop in NPL ratio is virtual or viable. In 2017, NBS issued a decision according to which banks were obliged to write-off all fully provisioned impaired receivables. Soon afterwards, stock of NPLs shrank considerably. Next time, NBS will not be able to surprise banks and force them to do write-offs. Secondly, Serbian economy is still fragile with below average economic growth rates compared to peer countries. Nevertheless, NBS in cooperation with other relevant institutions assembled a solid multilayer mechanism for dealing with banks` bad assets that has just passed a challenging test of resilience.

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PROBLEMATIČNI KREDITI I FINANSIJSKA STABILNOST – PRIMER SRBIJE

U radu se analizira otpornost i stabilnost bankarskog sektora Srbije suočenog sa pogoršanim kvalitetom ukupnog kreditnog portfolija od izbijanja svetske ekonomske krize. Na bazi seta odabranih indikatora procenjena je jačina uticaja problematičnih kredita na stabilnost bankarskog sektora. Indikatori su potvrdili da je srpski bankarski sektor očuvao solventnost tokom trajanja krize. Zaključak rada je da su preduzete mere značajno pomogle obaranju nivoa problematičnih kredita, uz ukazivanje na predostrožnost u krajnjoj oceni jer je smanjenje možda bilo prebrzo i preveliko pa se ne može isključiti efekat njihovog povratka u budućnosti. Finansijska stabilnost u Srbiji je očuvana i pored ozbiljnih pretnji i bez posezanja za državnom finansijskom pomoći.

Ključne reči: *bankarski sektor, problematični krediti, upravljanje krizom, finansijska stabilnost*