ORIGINAL SCIENTIFIC PAPER
UDK: 005.334:336.77(497.11)
336.77:338.1
DOI:10.5937/EKOPRE1802091T
Date of Receipt: January 29, 2018

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RESOLUTION OF NONPERFORMING LOANS IN SERBIA: STABILITY AS AN IMPERATIV

Rešavanje problematičnih kredita u Srbiji – stabilnost kao uslov

Abstract

The aim of this paper is to identify the factors that led to the rise in nonperforming loans in Serbia with a certain time distance. The paper focuses on measures and activities undertaken by the National Bank of Serbia (NBS) before and after the adoption of the NPL Resolution Strategy (hereinafter: Strategy), and the results of their implementation.

Numerous analyses indicate that the level and structure of nonperforming loans (hereinafter: NPLs) are determined by a combination of macroeconomic and bank-specific factors. The movement of NPLs in Serbia and the surrounding countries in the pre-crisis period was, to a large extent, the consequence of less conservative credit risk assessment models in an environment of robust credit expansion. An additional factor was inadequate collateral valuation. During the crisis, we were faced with a situation where the credit risk, taken in the previous period, materialised. NPLs grew in parallel with the deterioration of macroeconomic conditions. After several attempts to resolve this complex issue by using individual measures, it was confirmed in practice that a permanent resolution of NPLs requires a systemic approach and active involvement of all relevant institutions. Taking into account the factors behind the high level of NPLs, it was clear that a necessary and important component of success was the stabilisation of macroeconomic environment.

As price stability and relative stability of the exchange rate were ensured in Serbia and macroeconomic outlook improved, conditions were created conducive to the accelerated resolution of NPLs through numerous measures and activities, which particularly intensified after the adoption of the Strategy (August 2015). In the environment described above, the NPL stock halved since the Strategy adoption (down by 54%), reducing the share of NPLs in total loans by 12.9 pp to 9.5% (preliminary December 2017 data, final data could be slightly different), thus falling below the pre-crisis level.

Keywords: *nonperforming loans, financial stability, credit activity, economic growth, Strategy*

Sažetak

Cilj rada je da se sa izvesne vremenske distance izdvoje faktori koji su doveli do rasta problematičnih kredita u Srbiji, dok je fokus rada na merama i aktivnostima koje je Narodna banka Srbije preduzimala pre i nakon usvajanja Strategije za rešavanje problematičnih kredita (u daljem tekstu: Strategija), kao i na rezultatima do kojih je njihova primena dovela.

Brojne analize ukazuju na to da su nivo i struktura problematičnih kredita (u daljem tekstu: NPL) proizvod kombinacije makroekonomskih faktora i faktora specifičnih za pojedinačnu banku. Kretanje NPL-a u Srbiji i zemljama u okruženju u pretkriznom periodu je, u velikoj meri, bilo posledica manje konzervativnih modela procene kreditnog rizika u uslovima snažne kreditne ekspanzije. Dodatni faktor bila je i neadekvatna procena vrednosti kolaterala. Tokom krize suočeni smo sa situacijom da se kreditni rizik, preuzet u prethodnom periodu, materijalizovao. Beleži se rast NPL-a, što je proces koji se odvijao paralelno sa pogoršanjem makroekonomskih uslova. Nakon nekoliko pokušaja rešavanja ovog kompleksnog pitanja kroz pojedinačne mere, praksa je potvrdila da trajno rešavanje NPL-a zahteva sistemski pristup i aktivno uključivanje svih relevantnih institucija. Imajući u vidu faktore visokog nivoa NPL-a, bilo je jasno i da nužnu i važnu komponentu uspeha predstavlja i stabilizacija makroekonomskog ambijenta.

U Srbiji su, sa obezbeđenjem cenovne stabilnosti i relativne stabilnosti deviznog kursa, uz bolje makroekonomske perspektive, stvoreni uslovi da brojne preduzete mere i aktivnosti, koje su naročito intenzivirane sa usvajanjem Strategije (avgust 2015), rezultiraju ubrzanim rešavanjem pitanja NPL-a. U takvom ambijentu stok NPL-a je prepolovljen od usvajanja Stretegije (pad za 54%), a njihovo učešće u ukupnim kreditima smanjeno je za 12,9 p.p. na 9,5% (prema preliminarnim podacima za decembar 2017, konačan podatak može malo da se razlikuje), čime je palo ispod pretkriznog nivoa.

Ključne reči: *problematični krediti, finansijska stabilnost, kreditna aktivnost, privredni rast, Strategija*

Introduction

One of the problems the financial crisis opened in some countries and exacerbated in others was, indubitably, the growth in the level and share of NPLs. This phenomenon was particularly pronounced in developing countries that had faced robust credit expansion before the crisis. Hence, it is hardly surprising that in recent years NPLs have been the focal point of economic analysts, with the factors determining their level being targeted by more frequent and detailed empirical analyses, while measures and activities for their resolution have become a priority of central banks [5, pp. 1–26], [7, pp. 48–66], [2, pp. 1–32], [9, pp. 1–26].

In the period before the crisis, economic growth in Central, Eastern and Southeast Europe, including Serbia, was dynamic. Indeed, it was predominantly driven by consumption, which was, in greater share, financed by capital inflows and bank loans. Inflows were, to a large extent, channelled into the financial sector. In fact, it may be said that this period was characterised by the arrival of foreign banks from Western Europe, which brought new and cheaper sources of funding to the market. A period of robust credit expansion ensued. In such an environment, however, many countries experienced unwanted consequences. Inflationary pressures increased, and external imbalances deepened. It was logical and unavoidable to increasingly more often pose the question whether the credit expansion in some countries of that region resulted from the convergence process, or if this was a high-risk credit boom that could potentially jeopardise macroeconomic stability [4, pp. 83–104], [8, pp. 1–34], [1, pp. 201–231]. As the global economic crisis escalated, foreign capital inflow abruptly stopped and credit activity contracted. We may look for the causes of the decline in lending on "two fronts". On the one hand, sources of funding were reduced, while risk aversion of banks increased, i.e. the possibilities and readiness to lend to the private sector fell. On the other hand, in an environment of considerably lower income, loan demand also declined. Unfavourable macroeconomic trends that resulted in a decline in production and investment, unemployment growth, strong depreciation of local currencies in many countries, and lower real wages, also reflected negatively on the ability to repay earlier loans. This, and the fact that, in conditions of considerable inflows of sources of funding before the crisis, assessment of credit by the banks was not cautious enough, resulted in accelerated growth of NPLs. A contraction of high-quality demand for loans and the expansion of NPLs, which started to burden bank balance sheets and their results, led to a significant tightening in banks' standards and conditions for new lending. Without a doubt, this limited the demand for new loans, which, in turn, restricted investment and consumption, economic growth and disposable income. Thus, many economies in the region found themselves in an entangled web of growing NPLs, in part caused by deterioration in macroeconomic performance and a decline in economic activity, and in part by slower economic recovery in the following years that was not supported by bank loans (feedback effect). The negative impact of NPLs on the real economy in countries of that region was also empirically proved in a number of studies [9, pp. 1–26], [7, pp. 48–66], [6, pp. 11–31].

Aware of this complex problem and its consequences, in recent years economic policymakers in the region have made great efforts to intensify activities in terms of resolving NPLs. As expected, it was confirmed that the stabilisation of macroeconomic circumstances was a vital and, perhaps, the most important precondition for the permanent resolution of the accumulated NPLs, but, by itself, it was not enough. This necessary precondition had to be complemented by an additional systemic approach taken by commercial banks, the government and the central bank.

Serbia is a good example of the numerous measures and activities taken to curb the level of NPLs in the last five years. In the overall context, the most important thing was the systemic approach taken to narrow the internal and external imbalances of the country and create a more stimulating investment environment in a sustainable manner. This resulted in the start of the economic and investment cycle, which has reflected positively on credit activity since 2015, with the evident feedback effect from credit to economic activity. Having ensured the necessary macroeconomic preconditions, the field was cleared to take additional activities to "clean up" bad assets from bank balance sheets. As a "predecessor" to the strategy that will follow, in April 2015, the NBS prepared and distributed

to banks a detailed survey on the reasons behind the accumulation of NPLs in bank balance sheets. After analysing banks' responses, key regulatory and practical obstacles in the system that restrict the resolution of NPLs were established, and careful planning of measures for their removal commenced. This entailed efforts to increase bank capacities to efficiently resolve the issue of NPLs, encourage the development of the NPL market and monitor more closely asset quality to enable preventive action. The Strategy adopted in August 2015 [10, p. 16] focused precisely on those activities, while additional focus was placed on promoting and improving out-of-court debt restructuring and enhancing the framework for the mortgage and debt resolution in court. The Strategy was the result of cooperation between the NBS, relevant ministries and the Deposit Insurance Agency, with the participation of representatives from international financial institutions (the IMF, World Bank and EBRD). The complexity of the issue and comprehensiveness of the Strategy also implied interinstitutional coordination in its implementation, which is why two Action Plans were created. One was carefully defined and calibrated by the NBS and the other by the Government. Until end-2016, the NBS implemented all measures envisaged by its Action Plan. In conditions where several processes occur simultaneously – macroeconomic stabilisation, recovery of credit and economic activity, along with the implementation of measures and activities from the Strategy, the level of NPLs was reduced in nominal terms by RSD 232 bn (to RSD 198 bn), or by 54%, while their share in total loans fell by 12.9 pp (preliminary data). Furthermore, taking into account only the last two years (2016 and 2017), the share of NPLs declined by 12.1 pp to 9.5% in December 2017 (preliminary data[1]), meaning that their share in total loans fell below the pre-crisis level, which is still not the case in many countries in the region. The fall, during the last two years, was largely driven by the decline in NPLs of companies (by RSD 102.8 bn, where the share of NPLs declined by 13.5 pp to 10.1%), and companies in bankruptcy (by RSD 72.8 bn). This is the only relevant and practical confirmation that a systemic approach, with full commitment to resolving the existing and preventing further NPLs, may deliver the results also recognised by numerous international institutions that assess the conditions in the domestic banking system, such as the European Commission, European Central Bank, IMF, World Bank, rating agencies, etc.

The paper goes on to elaborate on the factors that precipitated the rise in NPLs in Serbia during crisis and post-crisis periods, the measures and activities taken by the NBS before and after the adoption of the Strategy, and the results achieved in this area, of which I am particularly proud.

The level and structure of NPLs in Serbia in the period before the adoption of the Strategy and the factors contributing to their growth

In the pre-crisis period, high lending activity growth rates were recorded in Serbia, as in other countries in the region. The credit expansion in this period resulted from the low base, dynamic consumption-driven economic growth and the process of real income convergence towards the European Union. One of the foundations of the pre-crisis growth in credit activity was the privatisation of the financial sector, primarily the arrival of foreign banks and their strategy for increasing their market shares. In an environment of higher inflow of sources of funding, the assessment of credit risk and collateral by banks was based on less conservative models than today. Banks approved loans with collateral in the form of real estate whose value was frequently overestimated (at times considerably so).

However, as the process was gaining momentum, the volume of credit expansion entered the territory where it spurred inflationary pressures and aggravated external imbalances, which necessitated the implementation of measures to limit lending, particularly to the household sector. The rise in the required reserve rate and the introduction of a limit on loans approved to households in relation to core capital induced credit expansion to be lower than if those measures had not been implemented. Nevertheless, expansion continued at high growth rates.

However, the process turned around due to global factors. The global economic crisis led to a drop in economic

1 All December NPL data are preliminary, final data could be slightly different.

activity in late 2008, when the environment characterised by global growth and risk aversion recorded a lower inflow and higher price of foreign sources of funding, followed by the outflow of those funds. Contracted loan supply and simultaneous decline in high-quality loan demand led to a contraction in credit activity. At the same time, recession, accompanied by rising unemployment and depreciation of the local currency in an environment with a relatively high share of loans indexed to a foreign currency, made the repayment of existing loans difficult. In such an environment, the high and rising level of NPLs became the source of systemic risk in the financial system of Serbia and countries in the region.

At the onset of the global economic crisis, in late 2008, the share of gross NPLs in Serbia was 11.3%, while in other countries in the region, that share ranged from 2.4% to 7.2%[2] (Figures 1 and 5). The previously dynamic real estate market, driven considerably by housing loans, contracted during the crisis. The decline in turnover and real estate prices, and the resulting drop in the value of collateral, further diminished the possibility of collecting loans using collateral. This, along with adverse macroeconomic trends as the crisis strengthened (decline in economic activity by 2% cumulatively, rise in unemployment by around 10 pp and the dinar's depreciation by over 22% in 2009–2012), led to a significant increase in NPLs. Such trends were recorded in Serbia and other countries in the region in parallel.

In 2009 alone, as the crisis escalated, the stock of NPLs in Serbia increased by over 50% (from around RSD 131 bn at end-2008 to around RSD 202 bn at end-2009), expanding their share in total loans by 4.4 pp to 15.7% at end-2009. As in most other countries, the corporate sector encountered the greatest difficulties in the orderly servicing of its liabilities due to problems of reduced liquidity. For this reason, in late 2009, over 75% of total NPLs related to the corporate sector (Figure 2). The rise in total NPLs continued in the years that followed, their share reaching 21.4% at end-2013. In the same period, the share of corporate[3] NPLs rose to around 24.5% at end-2013.

Based on the NPL structure by economic sectors, it is clear that adverse macroeconomic trends were a considerable factor of NPL growth during the crisis. As expected, the share of NPLs grew the most in sectors that were hit hardest by the crisis. In late 2013, over a half of all loans in construction were classified as nonperforming, in the real estate business – around two-fifths, and in manufacturing, mining and trade – one quarter (Figure 3).

The NPL ratio for households (including entrepreneurs) moved below the average for total loans, but during the period under review it also grew, to 10.7% at end-2013. As regards housing loans, which made up the majority of the banks' household credit portfolios, adverse trends in the labour market and the depreciation of the domestic currency during and after the crisis reflected negatively on households' capacity to settle liabilities.

In 2014, favourable macroeconomic trends, mainly the achieved price stability and relative stability of the exchange rate, coupled with the gradual recovery of economic and lending activity, first helped slow down the growth in the NPL share, and then stopped its growing trajectory in the period that followed. During the preparation and adoption of the Strategy, the share of NPLs in total loans reached 22.4%. Since the adoption and start of gradual implementation of the Strategy, the decline in their share has accelerated, which this paper will analyse in detail.

In the context of financial stability and international comparison, it is important to note that, even when their share exceeded 20%, NPLs did not jeopardise the stability of the Serbian financial system, owing to the high coverage by bank reserves for those purposes, both according to international standards and domestic regulations (Figure 4). In fact, Serbia had the highest coverage of NPLs by loan loss provisions compared to other countries in the region. Further, allowances for impairment of total loans (according to the International Financial Reporting Standards – IFRS) throughout the crisis remained above 50% of gross NPLs.

Also, taking into account the higher initial share of NPLs in Serbia before the crisis, the ensuing NPL growth in Serbia during and after the crisis was not higher than across the region. Quite the contrary. Of the nine countries observed, only Poland and Macedonia recorded slower

2 The analysis included Bosnia and Herzegovina, Bulgaria, Croatia, Montenegro, Hungary, Macedonia, Albania, Romania and Poland.

3 Includes public enterprises and companies.

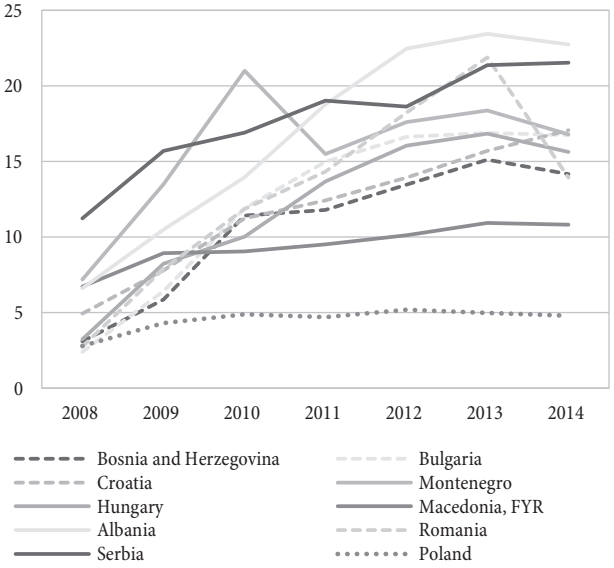
growth, while the rise in the share of NPLs in the remaining seven countries was faster than in Serbia.

Further, the stability of the domestic banking sector and its resilience to the assumed potential macroeconomic shocks were tested on a quarterly basis, and the results of the implemented macroprudential stress tests indicated that our system was stable and resilient even to shocks that did not materialise during the crisis. All of this did not make us passive in our efforts to intensify the resolution of NPLs, being aware that permanent resolution requires decisive action and an active approach, so as to untangle the web of mutual negative effects of economic activity and NPLs.

Activities of the NBS on NPL resolution prior to the Strategy

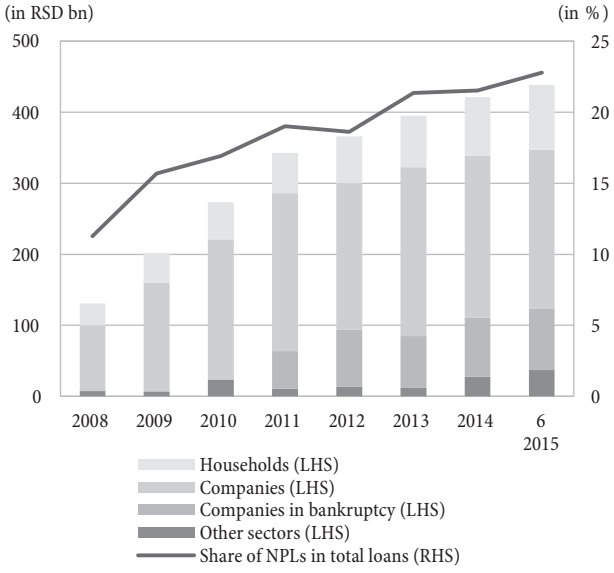
Even before the Strategy was adopted, the NBS undertook numerous measures and activities aimed at reducing the share of NPLs and their restricting impact on lending activity, and in turn on economic growth. Taking into account the importance of macroeconomic variables in

Figure 1: Share of NPLs by country (%)



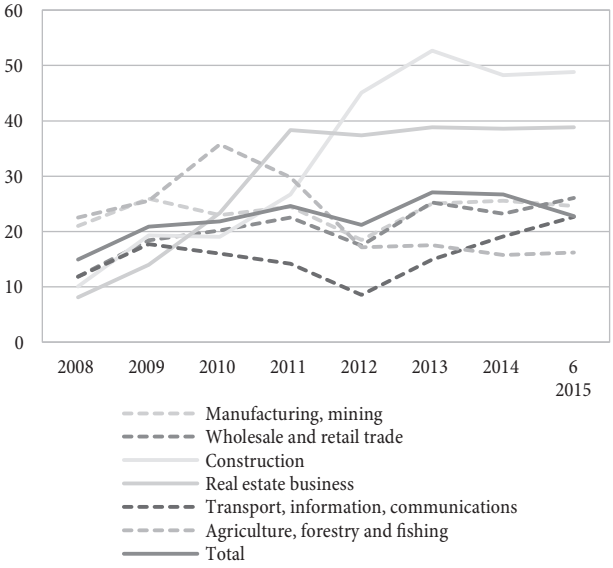
Sources: IMF and NBS.

Figure 2: NPL structure by sector



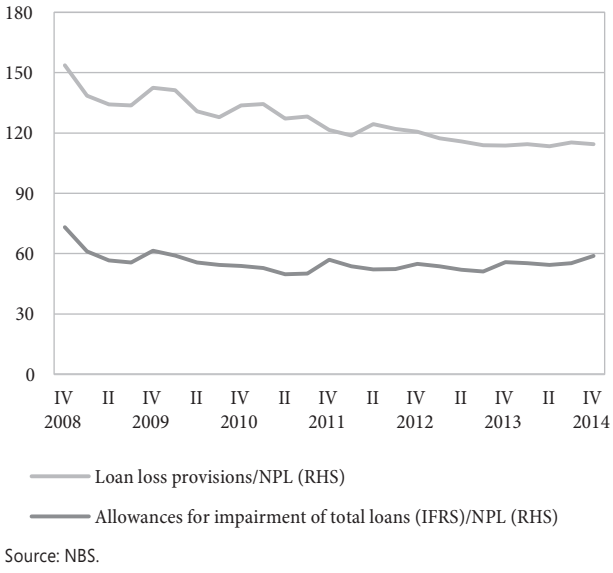
Source: NBS.

Figure 3: Share of corporate NPLs by activity (%)



Source: NBS.

Figure 4: NPL coverage (%)



Source: NBS.

respect of the level of NPLs (also confirmed empirically), it may be rightfully said that, by securing price stability and the relative stability of the exchange rate over the past five years, the NBS created the necessary presumption for NPL reduction in a sustainable way, thus contributing to a more favourable and predictable investment ambience.

Owing to timely and well-calibrated monetary policy measures, inflation was brought down from 12.9% in October 2012 to 2.2% a year later. In the following period, we preserved the stability of prices and ended the past four years with inflation at around 2%. Since mid-2017, y-o-y inflation has moved around the midpoint of the new, lower target tolerance band (at end-2017 it stood right at the central target point), which we trimmed by 1 pp to 3±1.5% as of 2017, owing to the achieved price stability and improved macroeconomic fundamentals. In the coming period, we expect inflation to continue to move within the target tolerance band, as do the corporate and financial sectors, whose expectations are anchored within the bounds of our target.

The lasting suppression of inflationary pressures has allowed us to ease the monetary policy much more than in previous cycles, and, by doing so, to more directly contribute to the recovery of lending and economic growth through this important channel (strong contribution came from the macroeconomic stabilisation, and we also used the reserve requirement instrument). For the sake of reminder, the current cycle of monetary policy easing through the key policy rate reduction began in May 2013. By end-2014 we lowered the key policy rate by 375 bp. In the following period, despite uncertainties in the international commodity and financial markets, additional room was created for easing of the monetary policy by 450 bp, to the level of 3.5% where it currently stands. The reduction was also supported by the adoption of a credible fiscal consolidation programme and its successful realisation. Naturally, both policies are most successful when fully coordinated. Therefore, we can say that the stabilisation of prices and the lowering of the NBS key policy rate by 375 bp in the period May 2013 – December 2014 was, by all means, a timely and adequate support needed to launch the subsequent fiscal consolidation process. The significant trimming of the NBS key policy rate served to pave the way for the sharp fall in rates on dinar loans to both corporates and households. In such macroeconomic conditions, and backed by competition between banks, interest rates on loans recorded an even sharper fall than the NBS key policy rate. Specifically, as of May 2013, rates on new dinar loans were reduced by 11 pp by December 2017 (to 4.8% for corporates and 10.6% for households). In the same period, interest rates on euro-indexed loans were reduced by around 4.5 pp (to 2.8% for corporates and 4.2% for households) which is an effect of the implementation of the ECB's monetary policy and, by all means, the result of the sharp fall in Serbia's risk premium – since August 2017, it has been at its lowest for Serbia (in December 2017 it fell below 100 bp while in January 2018 in some days it went below 90 bp).

Considerably lower costs of borrowing, together with stepped-up economic activity and recovery in the labour market, was the main factor behind the recovery of lending which has been continuously in the positive territory since the start of 2015 and accelerated to 7.4% y-o-y in December 2017. Therefore, in conditions of the country's macroeconomic stabilisation and achieved price stability as an important component of macroeconomic stability, lending struck the path of recovery, as did economic growth prospects. At first, this helped slow down the trend of the rising share of NPLs from 2013 until 2015, and in the case of economy, it resulted also in their fall as of mid-2014.

The importance of the relative stability of the dinar exchange rate in the context of NPLs is also not negligible. On the contrary, it is safe to say that the preserved relative stability of the exchange rate during the past five years is extremely important in this context. Namely, bearing in mind the relatively high share of FX-indexed loans, the depreciation of the dinar during the crisis was one of the generators of NPL growth. That is why the dinarisation of the financial system has rightfully been and remains one of the strategic priorities of the NBS for the purpose of both strengthening the monetary policy's transmission mechanism and reducing the FX risk in the system and, consequently, the NPLs. At the same time, the assortment of measures undertaken in order to encourage dinar lending and limit FX lending to debtors who are not hedged against the FX risk includes lower rates on dinar FX reserves (in

fact, 0% on dinar sources with the maturity longer than two years), introduction of the mandatory 30% deposit on currency-indexed loans to natural persons (except on housing loans), a ban on currency-indexed lending to natural persons except in euros, as well as many other measures. Owing to a blend of macroeconomic stabilisation and the measures undertaken, the share of dinar in total lending edged up to 33% in December 2017, from 28% at end-2012. Growth in the share of dinar loans was primarily recorded in the household sector – to more than 50% in July 2017, from 35% at end-2012. This reduces the FX risk of citizens who mainly earn in dinars, in case they borrow in a foreign currency, and in turn it diminishes the possibility of the occurrence of NPLs on those grounds. In principle, the household sector is by its nature less hedged against the FX risk than the corporate sector (in case of FX borrowing), as, owing to exports, corporates earn a portion of their income in a foreign currency.

In addition, to trigger the reduction of NPLs in the banking sector but also in order to support credit activity at the moment, the NBS adopted several countercyclical regulatory measures in the period prior to the adoption of the Strategy. For instance, in December 2012, amendments to the Decision on Risk Management by Banks eliminated the restrictions that pertained to the assignment of receivables from legal persons. The amendments allowed banks to mitigate credit risk by assigning due receivables from one legal person or entrepreneur to another legal person which needs not be predominantly engaged in the financial activity or have its head office in Serbia; it can also be a person associated with the bank. Naturally, acting as a responsible regulator, the NBS simultaneously established a control mechanism over the entire process of assigning receivables from legal entities. Also, amendments to the Decision on the Classification of Bank Balance Sheet Assets and Off-Balance Sheet Items from December 2012 offered additional incentives to banks for restructuring receivables from corporates. At the same time, mortgage may be accepted as adequate collateral if the borrower is in arrears up to 720 days (the previous period was limited to 360 days). In addition, the Decision on the Classification of Bank Balance Sheet Assets and Off-Balance Sheet Items was amended at end-2014 with the aim of relaxing the policy for funds provisioning for clients who regularly settle their obligations.

These measures yielded some positive effects and a number of banks took the opportunity to sell their NPLs and then use the proceeds to finance new projects, meaning that the goal of imposed countercyclical measures was achieved. The measures were designed taking into account the phase of the business and financial cycle.

In April 2015, the NBS began implementing Special Diagnostic Studies (SDS) of the quality of bank assets. In terms of their characteristics, the SDS were studies that had never been conducted in the domestic banking system before and which, observed by numerous criteria, had the character of an extremely complex and comprehensive procedure. The comprehensive studies were initiated in order to make a detailed assessment of the quality of bank assets based on a single and conservatively established methodology, including the reassessment of collateral in accordance with the internationally recognised assessment standards. The selected methodology relied largely on the methodology used in the assessment of the quality of bank assets in the EU territory, conducted by the ECB in 2014. The SDS of the quality of assets of banks in Serbia were conducted in 14 banks which were selected as systemically important and representative of the banking sector, and accounted for approximately 88% of total assets of the domestic banking sector [12, pp. 1–15]. The SDS enabled the assessment of the alignment of banks' accounting policies with the IFRS and the verification of banks' compliance with NBS regulations in terms of the classification of assets and the calculation of loan loss provisions, as well as their capacity to manage NPLs. Thus, the results of the SDS provided a basis for improving the regulatory and supervisory regulations, especially in the area of the IFRS, and were of great assistance when more concrete activities in the NBS Action Plan for the Implementation of the Strategy were defined.

NBS measures envisaged in the NPL Resolution Strategy

The next logical step in NPL resolution was the adoption of the NPL Resolution Strategy. The goal of drafting and

adopting the Strategy was clear – to provide incentives and eliminate identified obstacles in the system which prevented the timely resolution of NPLs and the establishment of a framework in which the possibility for new NPLs to occur would be reduced. The Strategy is complex and systematic, therefore its implementation also required inter-institutional coordination, which is why two Action Plans were composed. One was carefully defined and calibrated by the NBS, and the other by the Serbian Government. Activities envisaged by the NBS Action Plan (Table 1) primarily aimed to strengthen banks' capacity for NPL resolution, providing incentives for the development of the NPL market and a more adequate assessment of credit risk by banks. All activities envisaged by the NBS Action Plan were implemented within the set timeframe, some even earlier, and their implementation was one of the key factors behind the sharp fall in NPLs that has been present since 2016 [15, p. 98]. Below is a detailed overview with the most important activities envisaged in the Plan.

Important improvements have been implemented in certain areas, such as the accounting standards and practices, as well as collateral assessment. The last one was quite important bearing in mind that the inadequate collateral assessment was one of the factors that helped generate NPLs. A detailed analysis of the NPL market was also carried out. Going into details, activities regarding the improved implementation of IAS 39 were meticulously prepared and carried out. In this context, the Guidelines for the implementation of IAS 39, in the part pertaining to allowances for impairment, were prepared and published, along with listed supervisory expectations regarding the write-off of receivables and recognition of interest on NPLs. The banks' NPL reporting system was improved by prescribing the obligation to submit data regarding collateral, calculated interest, biggest exposures/debtors. A detailed plan was drafted to enhance the capacity of the NBS with respect to IFRS implementation. An analysis was carried out regarding the obstacles and restrictions of the NPL market which had never been done before in such detail. In accordance with the part of the NBS Action Plan regarding the improvement of supervisory requirements in relation to collateral management, additional requirements for banks were introduced in the context of monitoring the quality of collateral instruments and the work of persons assessing these instruments. The NBS established a comprehensive and functional database on valuation of mortgaged real estate and loans secured by mortgage.

In the part on supervisory activities and activities aimed at boosting the banks' capacity for NPL resolution, amendments to the Decision on the Classification of Bank Balance Sheet Assets and Off-Balance Sheet Items improved the regulatory framework for the treatment of restructured receivables to encourage sustainable restructuring practice and prevent the practice of unsustainable refinancing (evergreening) by introducing the concepts of the nonperforming exposure (NPE) and forborne exposure (FBE), which are applied in EU member states through the technical standard of the European Banking Authority. Namely, the conditions under which banks can improve NPL classification were tightened, giving a more precise picture of the quality of banks' portfolios, which at the same time leads to greater motivation of banks to adequately resolve this issue. In addition, the possibility was introduced for the assignment of NPLs of legal entities, entrepreneurs and agriculture producers to non-banking sector entities even before their maturity, which opened additional room for the development of the NPL market. In order to improve the management of distressed assets**,** additional requirements were introduced for banks in the context of strategic planning and the very process of distressed asset management. To increase the transparency of banks' operations in the part relating to asset quality, the Guidelines for Disclosure of Bank Data and Information Related to the Quality of Assets have been prepared.

The NBS has demonstrated its commitment to the preservation and strengthening of stability of the financial system, in accordance with its competences, by continuing to implement regulatory activities that went even beyond the Strategy's framework. In order to encourage banks to more efficiently resolve the NPL issue in their portfolios, in August 2016 the NBS adopted amendments to the Decision on the Classification of Balance Sheet Assets and Off-Balance Sheet Items, enabling the use of the model for the reduction and/or cancellation of the amount of required reserves for estimated losses depending on the decrease in the NPL ratio in banks' portfolios.

Table 1: NBS Action Plan for Implementation of the NPL Resolution Strategy

No	Goal	Activity	Result	Deadline	Deadline	Status
Banking supervision						
1	Enhancement of regulatory treatment of restructured receivables and restructuring process	• Analyse SDS results regarding practice and models banks are using in the process of restructuring, • Conduct a comparative analysis of regulatory solutions regarding the treatment of restructured loans implemented in EU countries, • Identify key regulatory stipulations which should be amended or introduced and analyse the impact of their application on banking sector indicators determining an appropriate model for the implementation of changes (phase-in approach or full approach at one point in time), • Strengthen (in consultation with relevant IFIs) the regulatory framework on the treatment of restructured loans, with the aim of fostering sustainable restructuring practices and counteract evergreening of problem loans • Incorporate the aforementioned supervisory expectations in on-site and off-site supervisory practices of the NBS, allowing for a continuous review of the implementation thereof.	Prepare new or amend existing regulations and additional documents	Q1 2016 [1]	✓	The Decision amending the Decision on the Classification of Bank Balance Sheet Assets and Off-Balance Sheet Items was adopted (RS Official Gazette, No 61/2016)
2	Enhancement of distressed asset management	• Analyse the results of a comprehensive survey on reasons for accumulation of NPLs and their resolution, • Conduct a comparative analysis of regulatory solutions and supervisory practices, • Analyse AQR results regarding distressed loan management in banks, • Develop (in consultation with relevant IFIs) supervisory guidance on distressed loan management, leveraging international best practices, • Incorporate the aforementioned supervisory expectations in on-site and off-site supervisory practices of the NBS, allowing for a continuous review of the implementation thereof.	Prepare new or amend existing regulation	Q1 2016	✓	The Decision amending the Decision on Risk Management by Bank was adopted (RS Official Gazette, No 61/2016)
Accounting standards and practices						
3	Enhancement of IAS 39 implementation	• Conduct a comparative analysis of regulatory solutions and supervisory practices, • Conduct analyses of AQR results regarding IAS 39 practices in banks, • Prepare (in consultation with relevant IFIs) supervisory policies setting forth enhanced expectations for robust loan-loss provisioning under IAS 39, • Scrutinise banks' write-off policies and convey supervisory expectations to Serbian banks, • Encourage prudent interest income recognition practices for NPLs, • Incorporate the aforementioned supervisory expectations in on-site and off-site supervisory practices of the NBS, allowing for a continuous review of the implementation thereof.	Prepare supervisory guidance regarding impairment provisioning under IAS 39, convey supervisory expectations on write-offs and income recognition on NPLs	Q4 2015	✓	Guidelines for the application of IAS 39 published, in part related to allowances for impairments stating the supervisors' expectations concerning the write-off of receivables and recognition of interest for NPLs
4	Strengthen the NBS's capacity in the area of the IAS	• Determine appropriate model for setting up continuous and robust review of classification and impairment practices and write-off policies in banks, • Organise an educational programme for employees of the Bank Supervision Department; • Analyse the need for increasing staff capacity in the Bank Supervision Department, • Continuous engagement with the Serbian audit profession.	Develop plan for capacity building	Q4 2015	✓	NBS capacity building plan prepared
5	Improvement of NPL reporting requirements (prescribe obligation for banks to report to the NBS data on collateral of NPLs, nonaccrual of interest of NPLs, largest NPL exposures/debtors)	• Analyse banks' capacities to deliver reports in demanded forms, • Draft reports and guidelines for filing reports, • Communication with banks with the aim of efficient customisation of their systems for reporting purposes.	Amend the regulation regarding NPL reports	Q4 2015	✓	Adopted Decisions on amendments to the Decision on Reporting aimed at improvement of the NPL reporting system (RS Official Gazette, Nos 111/2015 and 61/2016)
Disclosure requirements for banks						
6	Enhancement of disclosure by banks regarding information on asset quality	• Conduct a comparative analysis of disclosure requirements for banks, • Determine an appropriate model for disclosure requirements regarding content, forms, proportionality and level of information to be disclosed, • Communication of potential solutions to the banking sector.	Prepare amendments to the regulation on disclosure of information	Q1 2016[2]	✓	Published Guidelines for Disclosure of Bank Data and Information Related to the Quality of Assets

[1] Enters into force on 30 June 2016.
[2] Enters into force on 31 December 2016.

Table 1: NBS Action Plan for Implementation of the NPL Resolution Strategy

No	Goal	Activity	Result	Deadline	Deadline	Status
NPL market						
7	Identify and address obstacles to the Serbian distressed debt market	• Contribute to the analysis, overseen by the MoF, of potential obstacles to the emergence of a robust NPL market in accordance with the Action Plan of the Government.	Report on the identification of issues significant for the NPL market which are within the NBS competence – emphasising issues which can be marked as obstacles	Q4 2015	✓	Prepared Report on the opportunities and obstacles for liberalisation of assigning receivables from natural persons and other issues under the NBS mandate relevant for NPL market
8	Analyse the possibilities and obstacles for liberalisation of the assignment of retail receivables	• Analyse a potential market for retail NPLs from the supply side and possible effects of liberalisation, • Analyse comparative regulation and practices, • Analyse possibilities, potential risks, and regulatory impediments for liberalisation and models for establishment of possible infrastructure (licensing, supervision...).	Report on possibilities and obstacles for liberalisation of retail NPLs	Q4 2015	✓	
Collateral valuation						
9	Development of a database on real estate collateral valuations and loans approved based on reported collateral	• Prepare and adopt the decision on data regarding real estate collateral valuations and loans approved based on reported collateral, • Prepare guidelines for electronic submission of data regarding real estate collateral valuations and loans approved based on reported collateral, • Develop a comprehensive database regarding real estate collateral valuations and loans approved based on reported collateral, • Provide access to banks and provide an authorised appraiser with access to relevant data regarding real estate collateral valuation, after an adequate regulatory framework for appraiser profession is put in place, • Develop analytical tools for LTV[3] and DSTI[4] monitoring based on information provided for the database regarding real estate collateral valuations and loans approved based on reported collateral.	Database on real estate collateral valuations and loans approved based on reported collateral will be functional until end-2015	Q4 2015	✓	Established database on real estate collateral valuations and loans approved based on reported collateral
10	Strengthen supervisory requirements on the treatment of collateral	• Analyse SDS results regarding practice and models banks are using for collateral valuation and management, • Conduct a comparative analysis of regulatory solutions regarding the treatment of collateral, leveraging international best practices, • Identify key regulatory stipulations which should be amended or introduced, including regarding the frequency and substantive prudential requirements for collateral valuation and management, • Foster robust collateral management and valuation practices via on-site and off-site supervision.	Report on possibilities for strengthening supervisory requirements on the treatment of collateral	Q4 2015	✓	Prepared Report on the possibility for improvement of supervision requirements concerning the treatment of real estate taken as collateral by banks

[3] Loan to Value.
[4] Debt to Income.

Acting as a responsible regulator, in August 2017 the NBS adopted the Decision on the Accounting Write-Off of Bank Balance Sheet Assets[4], applied as of 30 September 2017. Under the Decision, banks are obliged to transfer NPLs that are fully (100%) impaired to the bank's off-balance sheet records. The direct effect of implementation of the Decision is best reflected in the total amount of direct write-offs which, in September 2017 only, equalled RSD 53.6 bn, with 80% of the write-offs pertaining to corporate exposures. Furthermore, in December 2017 we passed the Decision Amending the Decision on the Classification of Bank Balance Sheet Assets and Off-Balance Sheet Items. The Decision was carefully calibrated, after conducting analyses of certain situations that can emerge in practice. The measure is pre-emptive, i.e. it aims to limit the risk of NPLs "returning" to the banking sector, by discouraging individual transactions of NPL purchases from bank's assets, and the approval of loans whereby the bank's debtor directly or indirectly settles an NPL approved by the same bank. Sanctions have been envisaged for recognised cases in the form of increasing loan loss provisions, i.e. the classification of all receivables from a certain debtor to the most unfavourable classification group. In the coming period, the NBS will remain committed to permanently resolving this issue, by actively monitoring and analysing market developments. Coupled with preservation of macroeconomic stability, these will be important elements of the prevention of new NPLs.

4 https://www.nbs.rs/internet/english/20/kpb/accounting_write_off.pdf.

Results achieved

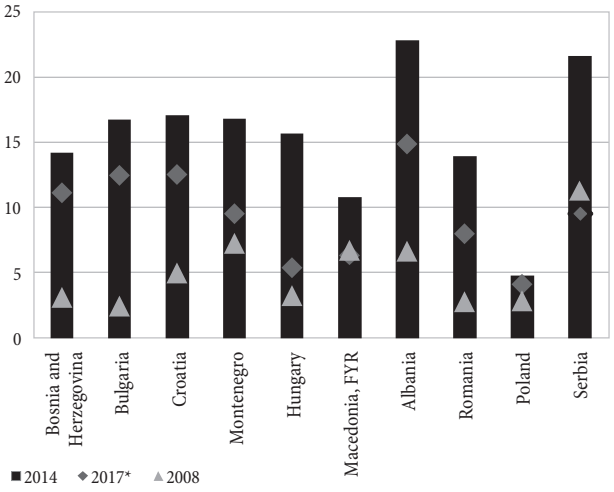
With several processes occurring in parallel – macroeconomic stabilisation, credit and economic activity recovery, along with the implementation of measures and activities stipulated in the Strategy, the level of NPLs was significantly reduced in 2016 and 2017, both in nominal (RSD 227 bn) and relative terms (as much as 53%), according to preliminary December 2017 data. In these two years the NPL ratio dropped by 12.1 pp, to 9.5% in December 2017 (preliminary data). The drop was largely driven by the decrease in corporate NPLs (by RSD 102.8 bn, with a 13.5 pp drop in the NPL ratio to 10.1%) and companies in bankruptcy (by RSD 72.8 bn).

Specifically, in 2016 the amount of these loans was cut by almost one fifth (by 18.6% to RSD 345.8 bn). In the same period, their share in total loans was reduced by 4.6 pp to 17.0%. Honouring the NPL growth factors, and the newly created environment, their reduction was expectedly the most prominent in the case of corporates (down by 6.0 pp to 17.6% in December).

In addition, it is discernible that after the Strategy adoption, banks intensified their activity in terms of NPL collection, restructuring, write-off and sale. Specifically, stimulated by the amendment of the regulations that provided a more favourable tax treatment for loan write-offs (write-off is recognised as expenditure), since the beginning of 2016 banks have written off RSD 45.7 bn worth of NPLs, mostly from corporates (RSD 41.4 bn), up by almost six times relative to a year before (Figure 8). Furthermore, the sale of corporate NPLs to entities outside the banking sector even before the maturity encouraged activity in the market of these loans. The fact that the amount of receivables assigned to entities outside of the banking sector in 2016 (RSD 57.1 bn) was up by 3.5 times compared to 2015 is illustrative of this. Thus, stimulating regulatory amendments encouraged both NPL write-offs and sale. In parallel, this process unfolded in conditions of better growth prospects, affecting also the structure of the NPL decrease by sectors (Figure 9). The fastest reduction is recorded in the sectors affected the most during the crisis and recording the greatest activity growth in the current process (construction, industry, trade). Only in 2016, the NPL ratio in construction was lowered by around 8.0 pp (to 30.2%) and by 3.5 pp (to 20.1%) in manufacturing. In parallel, the recovery of economic activity, accompanied with more favourable labour market trends and credit activity growth at significantly lower interest rates (on new and existing loans), pushed the household NPL ratio down by 1.7 pp (to 10.0% in December 2016).

During the course of 2017, banks and the NBS continued with NPL resolution activities. At the same time, lending activity continued up. The NPL stock declined additionally by RSD 148 bn (by end-December 2017), i.e. down by 43%

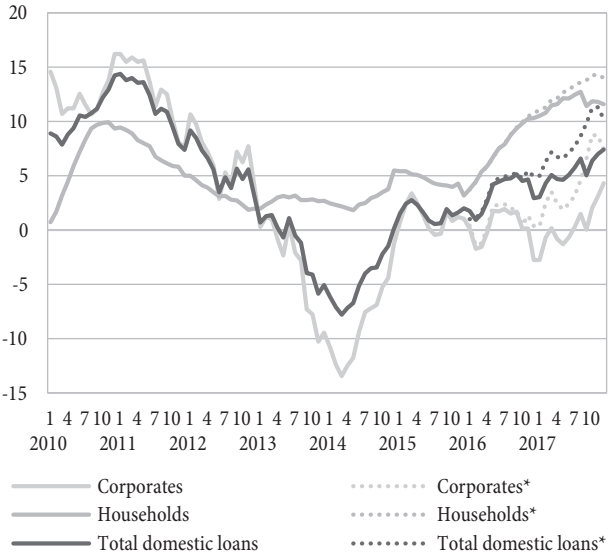
Figure 5: NPL share by country (%)



* Latest available data: Bosnia and Herzegovina, Bulgaria, Montenegro and Hungary - Q2 2017; Croatia, Macedonia, Albania and Romania - Q3 2017; Poland - Q2 2017; **Serbia - Preliminary data for December 2017.**

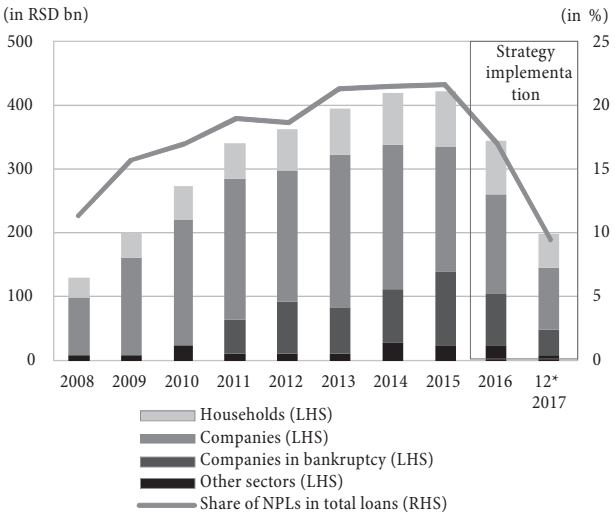
Sources: IMF and NBS.

Figure 6: Effect of NPL write-offs on lending growth (%)



Sources: NBS.

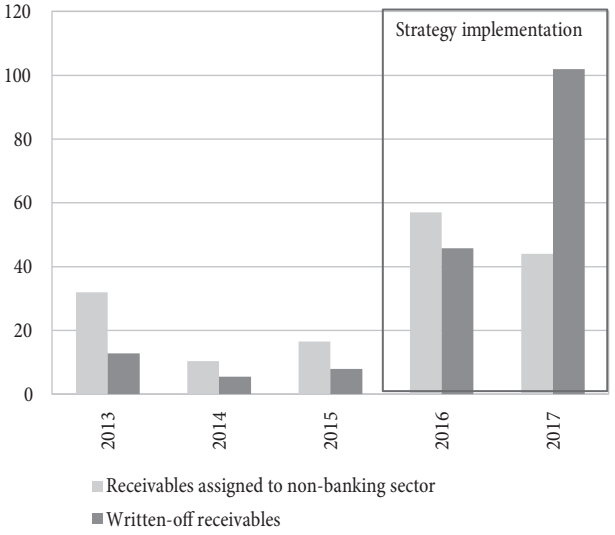
Figure 7: NPL structure by sector



* Preliminary data for December 2017.

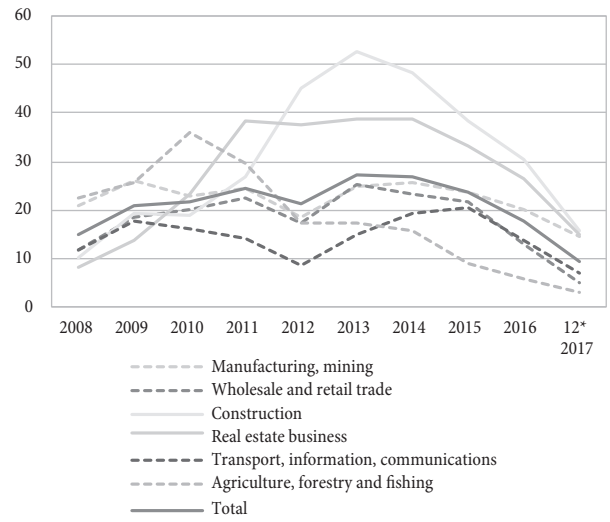
Sources: NBS.

Figure 8: Written-off and assigned receivables (RSD bn)



Sources: NBS.

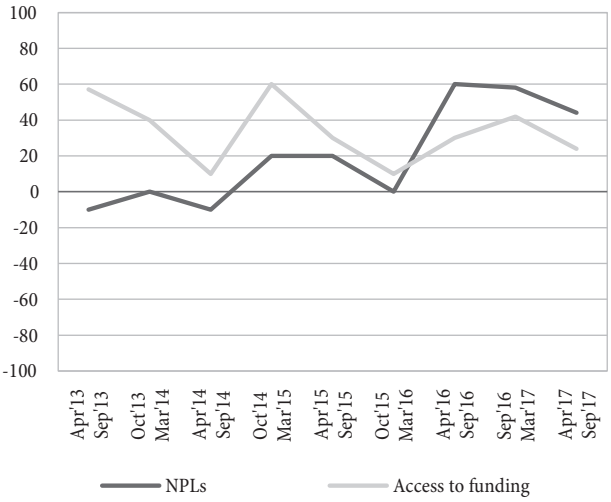
Figure 9: Share of corporate NPLs by activity



* Preliminary data for December 2017.

Source: NBS.

Figure 10: Net percentage of surveyed banks that reduced (%) NPLs and increased funding (%)



Source: EIB-CESEE Bank Lending Survey, H2 2017.

to RSD 198 bn (according to preliminary December 2017 data). The NPL share in total loans fell to 9.5% – bellow its pre-crisis level, which was not always the case with some other countries in the region (Figure 5). In terms of structure, 70% of the decline was recorded regarding companies and companies in bankruptcy (Figure 7).

While 2016 was marked by the write-off and assignment of receivables, the year of 2017 was more affected by write-offs, which were stimulated by regulatory changes. Though practice has shown that the largest write-offs take place late in a year, in the first eight months of 2017, RSD 12.9 bn worth of NPLs was written off, almost twice more than in the same period the year before. Then, after the Decision on the Accounting Write-off of Bank Balance Sheet Assets came into effect, only in September 2017, RSD 53.6 bn worth of NPLs was written off, which is RSD 7.9 bn more than in entire 2016 (Figure 8). Out of this September write-off amount, the major portion concerned corporate loans (RSD 37.8 bn). The amount of household NPL write-offs also increased (RSD 12.6 bn)[5]. During the whole 2017 write-offs amounted to RSD 102 bn, 2.2 times higher than the previous year.

5 The corporate sector includes public enterprises, companies and companies in bankruptcy. The household sector includes households, entrepreneurs, private households with employed persons and registered agricultural producers.

Despite stepped-up efforts to resolve the NPL issue, lending activity did not slow down, but y-o-y growth in total loans accelerated to 7.4% in December 2017, excluding the exchange rate effect (Figure 6). This result is practically more favourable given that it was achieved in the conditions of significant NPL write-offs which, in accounting terms, diminish the stock of bank loan receivables in the short run. Excluding the NPL write-off effect in the past year (the abovementioned RSD 102.0 bn, of which RSD 74.3 bn pertained to the corporate sector and RSD 23.5 bn to households), in December y-o-y growth in total loans equalled 10.2%. Growth, in y-o-y terms, in corporate loans reached 7.4% and in household loans 14.0%.

The fact that NPL resolution efforts have begun to produce a positive feedback effect on lending activity is also signalled by the results of recent bank lending surveys both of the NBS and the European Investment Bank [3, p. 93]. According to survey results, unlike the previous years, as of 2016 NPLs are no longer a factor that largely influences the tightening of credit standards in Serbia (Figure 10). As a matter of fact, according to the NBS bank lending survey [13, p. 2], [14, p. 2] and [11, p. 27], the NPL reduction was one of the factors that enabled the easing of credit standards in H2 2016 and Q1 2017.

Important in the context of financial stability is also the fact that NPLs are still more than fully covered by loan loss provisions. At the same time, the capital adequacy ratio is significantly above the regulatory minimum, currently equalling over 22%, which is its highest level in the past nine years. The high capital adequacy of the Serbian banking sector and its resilience to shocks have also been confirmed by the SDS – none of the 14 banks (with the total share in banking sector assets of 88%) covered by the SDS lacked capital.

As price stability and relative stability of the exchange rate were ensured in Serbia and macroeconomic outlook improved, conditions were created conducive to the accelerated resolution of NPLs through numerous measures and activities, which particularly intensified after the adoption of the Strategy. The results achieved in the period since the adoption and implementation of the Strategy are the following: the NPL share fell below its pre-crisis level (to 9.5% in December 2017, preliminary data), down by 12.9 pp, and the NPL stock contracted by 54%.

Conclusion

Pre-crisis developments in the majority of countries in the region of Central, Eastern and Southeast Europe (CESEE) were marked, among other things, by vigorous credit expansion, reflecting the low base, vibrant consumption-led economic growth and real income convergence to the European Union. However, credit risk assessment and collateral valuation by banks were made on the basis of less conservative models than it is the case today. Banks approved loans with collateral in the form

Table 2: Selected NPL indicators

		STRATEGY					
	Dec-14	July 2015	Dec-15	Dec-16	Dec* 2017	Change (Dec* 2017/July 2015)	
						absolute	relative
NPL (RSD bn)	**421**	**430**	**425**	**346**	**198**	**-232**	**-54%**
Share of NPLs in total	**21.5**	**22.4**	**21.6**	**17.0**	**9.5**	**-12.9**	**-58%**
NPL - companies	26.7	26.7	23.6	17.6	10.1	-16.6	-62%
Manufacturing, mining	25.6	22.9	23.6	20.1	14.8	-8.1	-35%
Wholesale and retail trade	23.2	25.0	21.5	13.1	5.0	-20.0	-80%
Construction	48.3	49.2	38.2	30.3	15.6	-33.6	-68%
Real estate business	38.6	37.9	33.3	26.4	15.0	-22.9	-60%
NPL - households (with entrepreneurs)	11.4	12.1	11.7	10	5.9	-6.2	-51%
Cash credits	10.4	10.6	10.1	7.5	4.3	-6.3	-59%
Credit cards	14.3	14.8	14.2	12.5	7.0	-7.9	-53%
Mortgages	8.2	9.8	9.5	8.7	6.3	-3.6	-36%

*** Preliminary data for December 2017.**

Source: NBS.

of real estate whose value was frequently overestimated (at times considerably so). As the activity moved into the zone of vigorous expansion, the question was posed whether credit growth was the result of the convergence process or it implied a credit boom that could generate inflationary pressures and deepen external imbalances. The latter entailed the application of measures to limit lending activity. What followed was the crisis period. As the crisis escalated, production and investment declined, unemployment soared, local currencies depreciated and real wages sank. At the time, a parallel process unfolded in Serbia and the majority of other countries of the CESEE region – the deterioration of macroeconomic performance and economic downturn fuelled the NPL growth and dented loan demand and supply, whilst on the other hand, the contraction in lending activity slowed down economic recovery. The fast-growing NPLs became the source of a potential systemic risk and one of limiting factors of lending activity and higher economic growth rates.

Aware of this complex problem and its consequences, economic policymakers in the region are making great efforts to intensify activities in terms of resolving NPLs. Serbia is a good example of the numerous measures and activities taken to curb the level of NPLs in the last five years. In the overall context, the most important thing was the systemic approach taken to narrow the internal and external imbalances of the country in a sustainable manner and create a more stimulating investment environment. The economic and investment cycles have been initiated as well, producing positive effects on lending activity since 2015. As expected, it transpired that the stabilisation of macroeconomic circumstances was a necessary and most important precondition for durable resolution of built-up NPLs, but was not sufficient. The strength of this turnabout had to be further reinforced by more efficient NPL resolution. Concretely, an additional systemic approach was needed as well. With this in mind, in August 2015 we adopted the NPL Resolution Strategy, as the outcome of cooperation between the NBS, relevant ministries and the Deposit Insurance Agency, with the participation of representatives from international financial institutions (the IMF, World Bank and EBRD). Two Action Plans were prepared, one of which is the NBS Action Plan. As of 2016, we implemented all measures envisaged by our Action Plan.

The Strategy results achieved so far give the basis to assess their success – since the adoption of the Strategy, the NPL share fell by 12.9 pp to 9.5% in December 2017 (according to preliminary data), below its pre-crisis level, while NPL stock declined by 54%. In terms of activity, the NPL share decreased by 33.6 pp in the construction sector, by 22.9 pp in the real estate sector, by 20 pp in the trade sector, and by 8.1 pp in manufacturing. In the household sector, the NPL share fell by 6.2 pp to 5.9% in December 2017 (according to preliminary data). In addition, we have exceeded the Strategy's framework, continuing to adopt measures even after the implementation of all activities envisaged by the NBS Action Plan.

The results that we have achieved in terms of NPL resolution in Serbia, through macroeconomic stabilisation and a systemic approach, with a focus on both resolving the current and preventing new NPLs, have also been recognised by relevant institutions assessing the situation in our banking sector. In December 2017, two rating agencies, Standard & Poor's and Fitch, upgraded Serbia's credit rating, with stable outlooks. They assessed that the domestic banking sector is liquid, adequately capitalised (as also confirmed through extensive SDS), with a sharp fall in the NPL share and the recovery of lending activity.

Although the results achieved are undeniably excellent, there is room for further improvement – both in terms of wider usage of possibilities opened by the Strategy, especially for the restructuring of receivables, write-off and sale of NPLs, but also in terms of expected acceleration of economic growth and a conservative credit risk assessment by banks. We have the potential and I believe that banks will continue to use the created possibilities.

Finally, in light of all factors of NPL generation and growth, we may say that by ensuring price stability and relative stability of the exchange rate, the NBS has created an indispensable and key assumption for the NPL reduction on sustainable grounds, contributing thus to a more favourable and predictable investment environment. The Strategy was designed and implemented as a logical upgrade, following macroeconomic stabilisation and better future prospects. I believe that ahead of us is a period of

stable growth in lending activity and disposable income, investment and savings, and, by extension, growth in economic activity and the standard of living on more sustainable grounds.

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has been serving as Governor of the National Bank of Serbia since August 2012. In early 1992, she was employed by Prištinska banka a.d., part of the Beogradska banka system, as Deputy General Manager and continued to work in the banking industry until 1999. From March 1998 until October 2000, she served as Minister of Economic and Ownership Transformation in the Serbian Government. Since 1999 until her appointment as Governor, she worked in the Telecommunications Company "Telekom Srbija", initially at the position of General Manager of the Logistics Department (March 2005-December 2008), after which she worked as an expert for economic operations.

She obtained an MA degree in 1999 from the Faculty of Economics of the University of Priština and earned her PhD in Economics from the same university in May 2011. She has authored a number of studies on privatisation and financial markets. In 2006 and 2007, she lectured at the Faculty of Management in Novi Sad.