EXPLANATION OF THE COUNTERCYCLICAL BUFFER RATE FOR THE REPUBLIC OF SERBIA

The Decision on the Countercyclical Buffer Rate for the Republic of Serbia (RS Official Gazette, No 58/2017) was adopted based on Article 14, paragraph 1, item 11) of the Law on the National Bank of Serbia (RS Official Gazette, Nos 72/2003, 55/2004, 85/2005 – other law, 44/2010, 76/2012, 106/2012 and 14/2015), which authorises the Executive Board of the National Bank of Serbia to determine measures and activities, within the scope of authority of the National Bank of Serbia, aimed at maintaining and strengthening the stability of the financial system, and Section 436 of the Decision on Capital Adequacy of Banks (RS Official Gazette, No 103/2016, hereinafter: Decision on Capital Adequacy), which prescribes that the National Bank of Serbia sets the countercyclical buffer rate for the Republic of Serbia.

Aiming to implement the Basel III regulatory standards, the Decision on Capital Adequacy transposed into the domestic regulatory framework the Directive on capital requirements for credit institutions No 2013/36/EU (hereinafter: Directive), which regulates capital buffers. Advantages of introducing the buffers are illustrated by the fact that they increase banks' resilience to losses, limit excessive or underestimated exposures and restrict capital distribution. Among the buffers prescribed by the Directive is the countercyclical capital buffer. This instrument creates an additional buffer of Common Equity Tier 1 capital during periods of excessive credit growth to improve the resilience of the banking sector and reduce the possibility of a financial crisis outbreak.

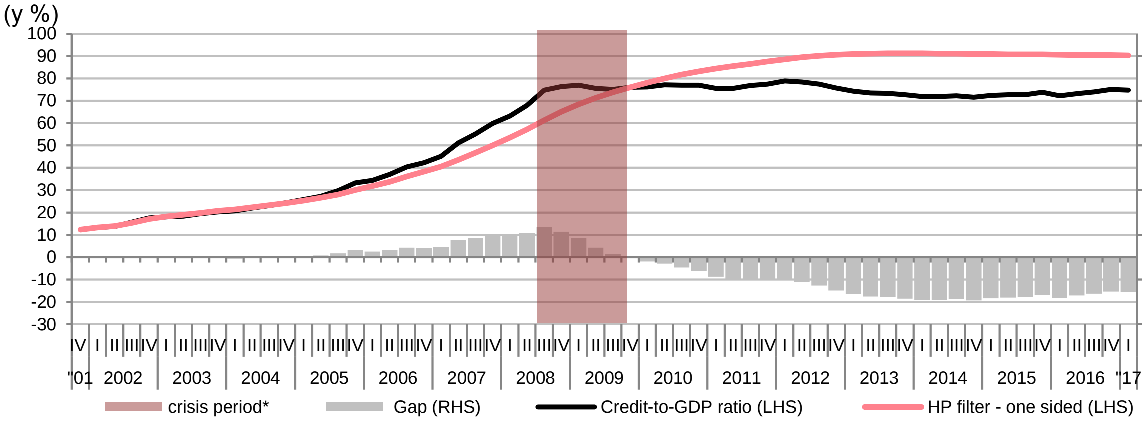
Systemic risk is the risk of disruption in the provision of financial services in the financial system with the potential to have serious negative consequences for the real economy. It includes two dimensions. The first dimension is structural risk, i.e. the risk stemming from linkages among financial institutions (cross-sectoral dimension of risk), while the second dimension is the time component, i.e. the risk that varies through time and depends on the financial cycle phase (cyclical dimension of risk). The Countercyclical Capital Buffer (hereinafter: CCB) addresses the second dimension of systemic risk and is introduced to mitigate financial procyclicality.

The CCB is introduced to enable sustainable crediting of the economy during an economic downturn, to increase the resilience of the banking system, and to reduce the possibility of a financial crisis outbreak and its intensity. This instrument creates an additional capital buffer during periods of excessive credit growth, which can be released when systemic risks materialise, mitigating systemic risks of a cyclical nature.

In accordance with Section 436, paragraphs 2 and 3 of the Decision on Capital Adequacy, the guide for setting the CCB rate is the deviation of the share of loans in GDP from long-term trends, i.e. the credit-to-GDP gap. The CCB rate for the Republic of Serbia is set in line with the recommendation for setting the CCB rate of the European Systemic Risk Board (ESRB/2014/1). Also, in setting the rate, some specificities of the Republic of Serbia are taken into account, particularly those relating to the high share of loans in foreign currency.

The credit-to-GDP gap shows the deviation of the share of loans in GDP from long-term trends. This indicator signals the extent to which credit growth was stronger than GDP growth during a given period. If this ratio is considerably higher than the long-term trend at a given moment, i.e. if the estimated gap is higher than the reference value, credit growth is considered to be excessive.

Chart 1. **Credit-to-GDP ratio and its long run trend**



Source: National Bank of Serbia
*Based on SSI

Chart 1 shows the share of credit activity to the non-government sector in GDP, the long-term trend and the estimated credit-to-GDP gap. Following a period of expanding credit activity between 2000 and 2008, the credit-to-real GDP gap has been negative since late 2009. March 2017 data show that the share of total loans in GDP equalled 74.4%, while the estimated credit-to-GDP gap was -15.6 percentage points. The estimated credit-to-GDP gap indicates that the current share of loans in GDP is below the long-term trend, i.e. that we are currently in the phase of the financial cycle where introducing a CCB rate above 0% could restrict credit activity.

Also, if the estimated credit-to-GDP gap is equal to or below 2 percentage points, the guide equals 0%,[1] whereas the estimated gap of over 2 percentage points indicates a need for introducing the CCB rate of over 0%. If the credit-to-GDP gap is above 10 percentage points, the guide equals 2.5%. If the estimated credit-to-GDP gap is in the interval between 2 and 10 percentage points, the guide is determined linearly in the following way:

Guide = 0.3125 × Estimated gap – 0.625

Although the guide for setting the CCB rate increases linearly with the estimated gap and can be anywhere between 0 and 2.5%, based on Section 437, paragraph 1 of the Decision on Capital Adequacy, the National Bank of Serbia sets the countercyclical buffer rate for the Republic of Serbia within the range of 0% to 2.5% of risk-weighted assets of a bank, calibrated in steps of 0.25 percentage points or multiples of 0.25 percentage points.

The estimated credit-to-GDP gap of -15.6 percentage points is below the benchmark value of 2 percentage points, which means that the guide for setting the CCB rate equals 0%. Based on the above, the countercyclical buffer rate for the Republic of Serbia was set at 0%. All banks licensed by the National Bank of Serbia are obliged to maintain the countercyclical capital buffer on an individual and consolidated basis equivalent to their risk-weighted assets amount multiplied by the specific countercyclical buffer rate in accordance with Section 435, paragraph 1 of the Decision on Capital Adequacy.

The European Systemic Risk Board (ESRB, 2014) recommends using additional optional indicators that may indicate the accumulation of systemic risk and relate to the following segments: indicators of credit development, indicators of private sector debt, indicators of real estate price movements, indicators of external imbalances, indicators of adequate risk assessment and selected banking sector indicators. In order to set the countercyclical buffer rate for the Republic of Serbia, in addition to the indicator of deviation of the share of loans in GDP from long-term trends, additional optional indicators were also taken into account in accordance with Section 436, paragraph 4 of the Decision on Capital Adequacy. Optional indicators for monitoring credit activity were used, which illustrate the characteristics of the domestic financial system and relate to the real estate market, external imbalances and movements in the banking sector.

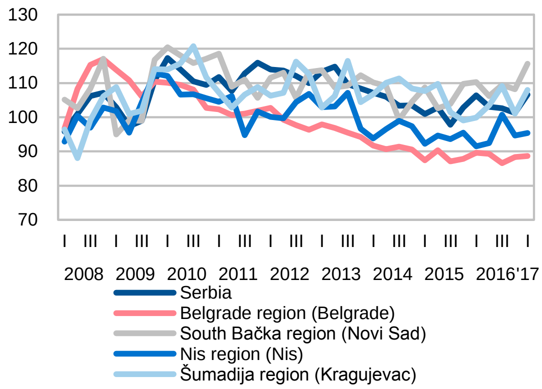
[1] See: Recommendation of the European Systemic Risk Board of 18 June 2014 on guidance for setting countercyclical buffer rates (ESRB/2014/1), Annex Part II.

Real estate market

Real estate is very commonly used in the domestic banking sector as loan collateral. Changes in market values of real estate impact the quality of the credit portfolio of the banking sector, and the price and availability of loans. For this reason, it is particularly important to monitor and analyse movements in the real estate market.

Real estate market indicators for the Republic of Serbia do not reveal any risk accumulation, and show instead that this segment of the financial market is recovering.

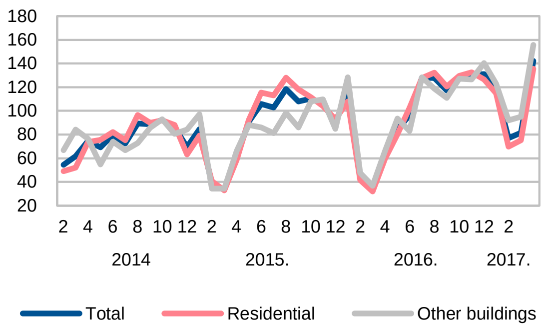
Chart 2 **Real estate index DOMex**
(index, average 2002 - 2010 = 100)



Source: National Mortgage Insurance Corporation.

Serbia's average real estate price, as measured by DOMex, increased by 0.3% y-o-y at end-Q1 2017, and by 5.4% q-o-q. In view of the decline of interest rates and improved macroeconomic fundamentals, there is potential for a further rise in housing loan demand.

Chart 3 **Indices of the number of newly issued building permits**



Source: Statistical Office of the Republic of Serbia.

The number of issued construction permits doubled at end-Q1 2017 relative to the same period in 2016. The share of NPLs in total corporate loans amounted to 28.3% at end-Q1 2017 and declined by 9.4 pp y-o-y.

The average LTV[2] ratio of new housing loans is still significantly below the regulatory maximum of 80%, amounting to around 70% in Q1 2017.

[2] In accordance with the Decision on Measures for Safeguarding and Strengthening Stability of the Financial System (RS Official Gazette, No 34/2011), banks may approve mortgage loans provided that the amount of the loan does not exceed 80% of the value of the property mortgaged.

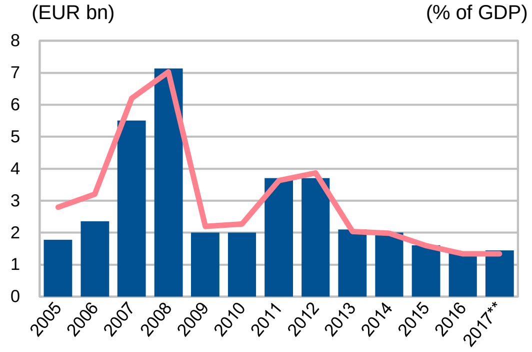
Indicators of external imbalance

Improvement in domestic macroeconomic conditions leads to a decline in sensitivity to external risks. As a result of improved trade balance, in 2016 the share of the current account deficit continued down to 4% of GDP at end-2016.

In Q1 2017, the current account deficit was somewhat higher owing to lower exports and higher energy imports due to extremely hold weather in early 2017. Following a temporary rise in Q1, the current account deficit is expected to continue to decline in the coming period. The National Bank of Serbia estimates the share of the current account deficit in GDP to be around 4% at end-2017.

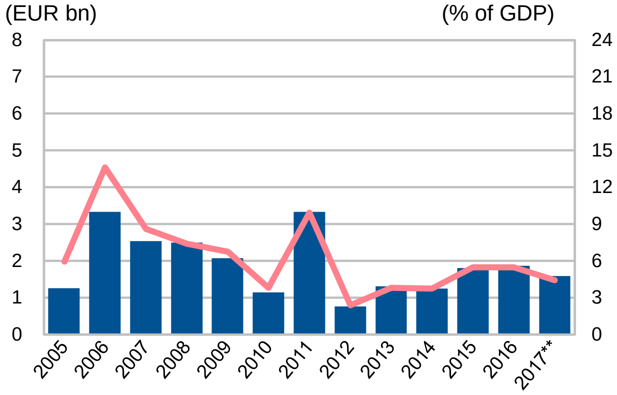
Net inflow of foreign direct investment in Q1 2017 equalled EUR 370.1 mn, directed predominantly to export-oriented sectors. Net inflow of FDI is expected to be more than enough to cover the current account deficit in 2017 as well.

Chart 4 **Current account deficit**



*Starting from 2007 data on exports and imports of goods and services are shown in accordance with BPM6. Data for 2005 and 2006 are shown according to BPM6.
** NBS estimate.
Source: Statistical Office of the Republic of Serbia and NBS

Chart 5 **Net foreign direct investments***



*Starting from 2007 data on exports and imports of goods and services are shown in accordance with BPM6. Data for 2005 and 2006 are shown according to BPM6.
** NBS estimate.
Source: Statistical Office of the Republic of Serbia and NBS

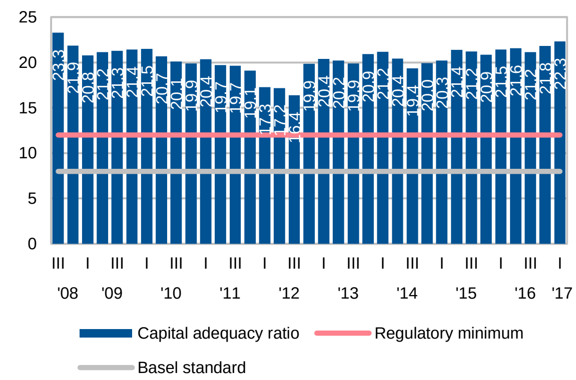
Main indicators of the banking sector

Banking sector indicators show that the banking sector is adequately capitalised. Also, banking sector stability is confirmed by the declining level of NPLs, by the fact that there is no concentration of some types of assets in the banking sector, and by the satisfactory degree of competition.

At end-Q1 2017, the capital adequacy ratio equalled 22.3%, which is well above the regulatory minimum (12%) and more than two and a half times higher than the EU minimum (8%). The LtD ratio (ratio of loans to deposits) stayed below 1 at end-Q1 2017, indicating that banks rely more on domestic, stable sources of funding, such as deposits.

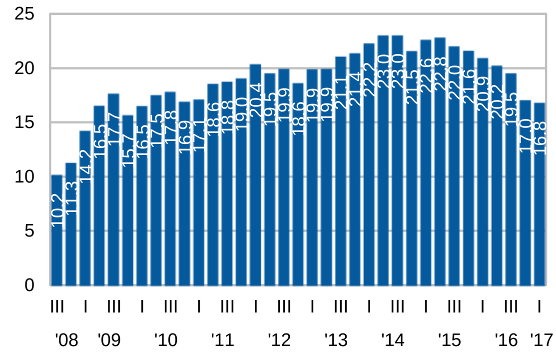
The share of NPLs in total loans of the banking sector remains relatively high, albeit with an apparent downward trend. In March 2017 it amounted to 16.8%, down by 4.1 pp from March 2016. The reduction in the share of NPLs resulted greatly from the write-off and assignment of receivables. The above evidences the feasibility of the coordinated approach envisaged by the NPL Resolution Strategy and action plans of the Government and the National Bank of Serbia.

Chart 6 **Capital adequacy ratio**
(%)



Source: National Bank of Serbia.

Chart 7. **Non-performing loans**
(share in total gross loans, %)



Source: National Bank of Serbia.

Assessment of systemic risk in the financial system of the Republic of Serbia

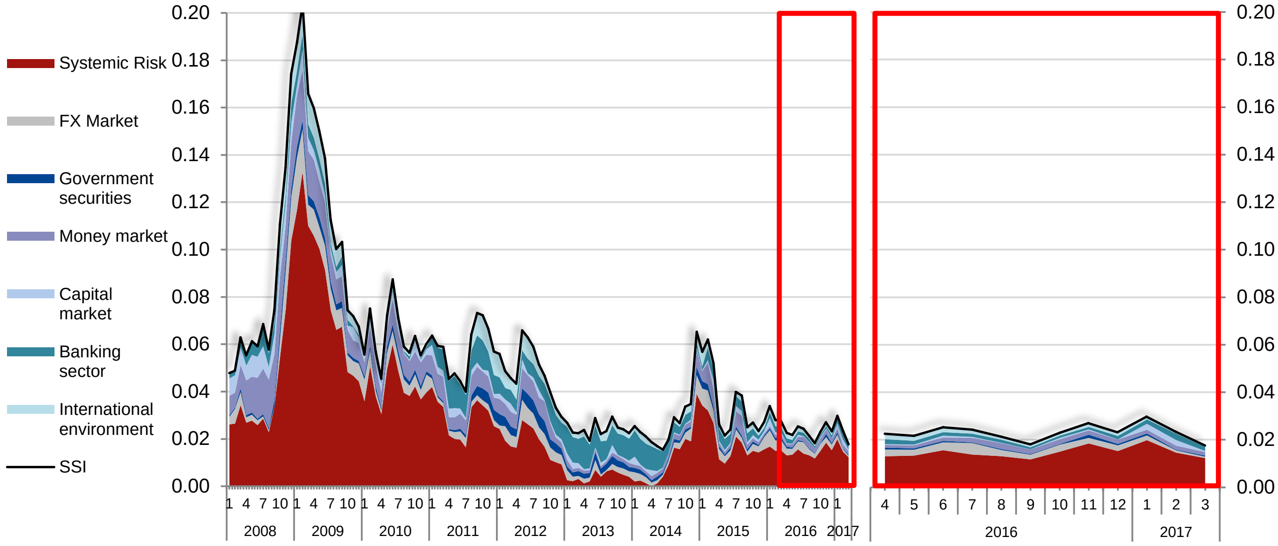
The systemic stress indicator (hereinafter: SSI) was created in order to identify periods of crisis and the level of systemic risk in the financial system of the Republic of Serbia, and to assess the systemic component of stress. The SSI includes a set of indicators that show the level of financial stress in the six most important segments of the financial system of the Republic of Serbia: the foreign exchange market, government securities market, money market, capital market, banking sector and international environment.

In 2016 and Q1 2017, the SSI indicated a period of low risk, with a stable and low systemic component.

Relative stability of the dinar's exchange rate was maintained in conditions of high uncertainty in the international environment, which limited risks in the foreign exchange market and consequently limited systemic risk. Movements in the market of government securities show that risk is low owing to better macroeconomic outlook, improved public finance and lower risk premium of the Republic of Serbia. Relatively low interest rates and a consistent monetary policy of the National Bank of Serbia contributed to stability in the money market. In early 2016, affected by risks from the international environment, BELEX15 declined mildly, after which it started to grow. Indicators of the banking sector suggest that it is stable, while lending and deposits are on the rise. Quarterly macroprudential stress tests of the banking sector carried out by the National Bank of Serbia confirm adequate capitalisation and high liquidity of the Serbian banking sector. The UK's decision to withdraw from the EU and the Fed's monetary tightening raised instability in the international environment, which created volatility in the movement of the Emerging Market Bond Index – EMBI Composite. Still, this index continued down until the end of Q1 2017.

Low inflationary pressures, consistent implementation of fiscal consolidation measures and structural reforms, further monetary easing and banking system stability contributed positively to strengthening the resilience of the domestic financial system, and, by extension, to the country's macroeconomic stability.

Chart 8 **Systemic stress indicator dynamics and contribution of the most important risk factors to the Systemic stress indicator**



Source: National bank of Serbia