Required Reserves and Illiquidity in the Economy

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Overcoming the problem of illiquidity of economy is a fundamental issue that the professional community has been dealing with for months. Numerous proposals to finding the solution emerge nowadays, of which the topical one is related to the reduction of the required reserve rate allocated by the banks with the NBS. Proponents believe that the funds released in this way would affect the growth of bank lending, and that it will contribute to the reduction of interest rates thus making the loans more available. The end result would ease the problems of illiquidity.

On the other hand, the main objective of the National Bank of Serbia is to maintain price stability and financial sector stability. A strict policy regarding capital adequacy has maintained the stability of the system. Simultaneously, in order to achieve the inflation target rate, active adjustments were made of the reference interest rate as a market and legal instrument of implementation of the monetary policy measures. Despite the fact that the downward adjustments created the preconditions for lending activities growth, the growth did not happen. Strong credit risk growth neutralized the transmission effects of the measures taken on the credit activity.

Having in mind these circumstances, the question arises as to whether the adjustment of the required reserve - specifically the reduction of the required reserve rate - may affect the lending activity growth.

Required reserve policy had previously been focused on preserving the stability of the financial sector and on limiting the inflationary pressures. Due to effects that can cause the movement of macroeconomic variables, the rates corrections were not usual. At the beginning of the crisis period a very high required reserve rate contributed to the achievement of stabilization goals. In early 2010, when it became apparent that high rates became a limiting factor for further strengthening of economic activity, the NBS made corrections of rates on both the dinar and foreign currency base. Finally, in February 2011, the NBS made system corrections through differentiating rates depending on the maturity of bank liabilities, trying to create an environment in which the funds will be available to the private sector, while maintaining stability. According to the current regulations, the reserve ratio is the following:

- 0% on the dinar liabilities, with maturity over 2 years;
- 5% on the dinar liabilities, with maturity up to 2 years;
- 25% on the foreign currency liabilities, with maturity over 2 years, and 30% on the foreign currency liabilities, with maturity up to 2.

Of the total dinar reserves, the pronounced one is the reserve calculated on the dinar base, but also 10% and 15% of foreign currency reserves calculated on the foreign exchange liabilities with maturity of over and up to 2 years, respectively.

The table below shows that the required reserve rate on the foreign currency in our country is the highest in the region, but that gap was significantly reduced in the previous period. In most countries, required reserve as a monetary policy instrument is not used actively, primarily due to the fact that inflation targeting policy (implemented by most states) involves the use of interest rate channel in order to affect the economic activity and inflation.

Required reserve rates and changes since the year of 2010 in selected countries

Country	*Required reserve rate*	*Corrections from Q1 2010*
Serbia	0% on the dinar base, with maturity over 2 years 5% on the dinar base, with maturity up to 2 years 25% on the foreign currency base, with maturity over 2 years 30% on the foreign currency base, with maturity up to 2 years	Q2 2010 - reduction in rates Q1 2011 - introduction of differentiated rates, correction of allocations in dinars
Croatia	flat rate of 14%	Without change
Montenegro	flat rate of 10%	Without change
Macedonia	10% on denars 20% on denars with foreign currency clause 13% on foreign currency	Without change of rate
Romania	15% on leu 20% on the foreign currency base	Q2 2011 - reduction in rate on the foreign currency base, introduction of differentiated rates
Hungary	2–5%	Q3 2010 - abandonment of flat rate
Eurozone	flat rate of 2%	Without change

Sources: Central banks of the said countries

Structurally observed, the existing system of required reserve slightly favors the sources of funding from abroad over domestic sources. Namely, as for two very important categories that relate to foreign sources, the required reserve is not allocated to the following:

- Deposits and loans granted abroad in the period September 2008-March 2010, and
- Funds received from international financial institutions, governments and institutions established by foreign countries, provided that the agreed principles of interest margins are respected upon the replacement.

Such a system of measures is aimed at maintaining a relatively low level of interest rates for foreign loans and for encouraging higher inflow of capital in the crisis period, during which the prices of foreign sources have risen significantly. On the other hand, in an effort to reduce euroization of the system, the required reserve rate on foreign currency savings has remained at high level of 30%, because 95% of foreign currency savings has a maturity up to one year. Therefore, domestic sources of credit growth are still disfavored and increasingly expensive. Banks that have access to cheaper foreign sources are indirectly placed in a privileged position in relation to that part of the sector whose credit potential is based on domestic savings.

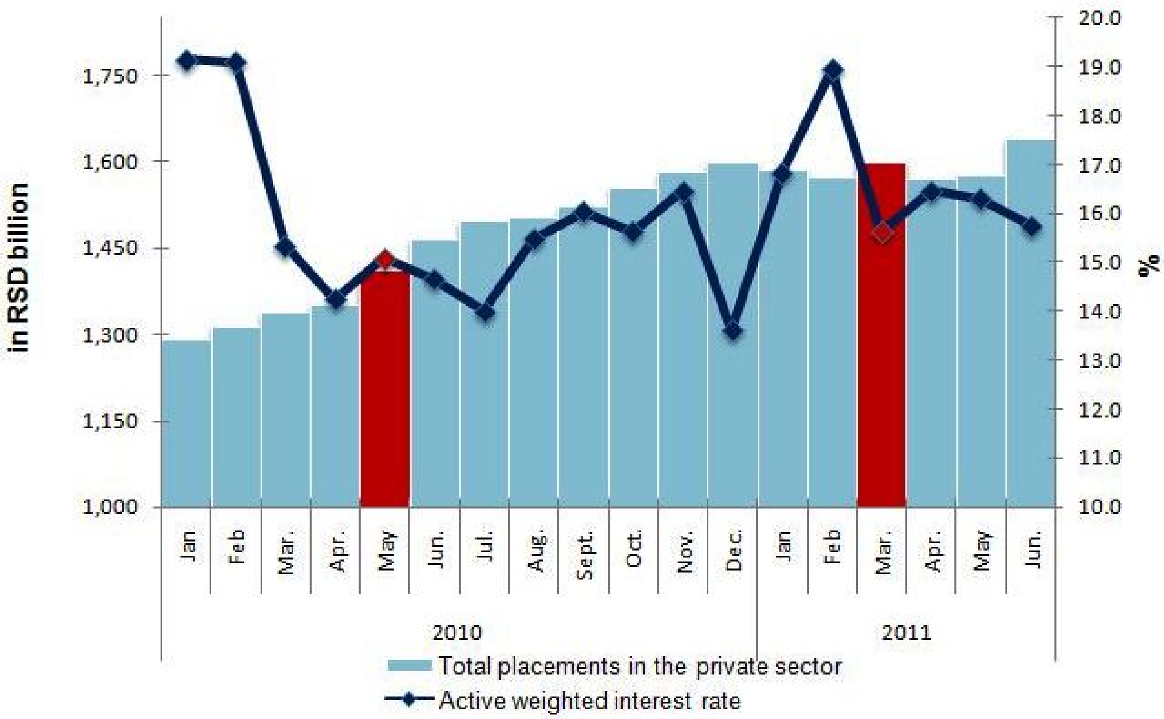
There is still enough room for the corrections of the current system, primarily due to two facts:

- foreign sources are expensive and almost unavailable to a large number of banks,
- statistical data show that credit growth in the previous period was largely financed from domestic sources and these sources are substantially denominated in foreign currency

Although the statistical effect of changes in required reserve rate was not demonstrated empirically on credit and deposit activities, on the level of interest rates and on borrowings from abroad, we will present several possible scenarios (summarized in the table). We will focus on the impact of rate reduction and show the effects on the said variables during the previous rate adjustments:

1. **Rate reduction will result in cheaper loans and in strengthening of credit activities.** Depending on the structure of funding sources, interest rates on certain types of loans will be more or less reduced. In Serbia, the dominant portion of domestic savings is made up of foreign currency deposits with maturity up to 12 months Reduction of the required reserve rate on this portion of foreign currency base can result in the decrease in active interest rates on short-term loans to the private sector, especially with banks in which domestic sources of placements dominate in the liabilities item. However, as can be seen in the chart, the corrections of the system in May 2010 and in March 2011 had neither a significant direct impact on the level of interest rates, nor on the overall level of credit growth to the private sector. The main reason for the above lies in the fact that the level of credit risk, which is extremely high in the entire private sector, has a dominant influence on the banks' decision about the interest rate level and the level of placements.

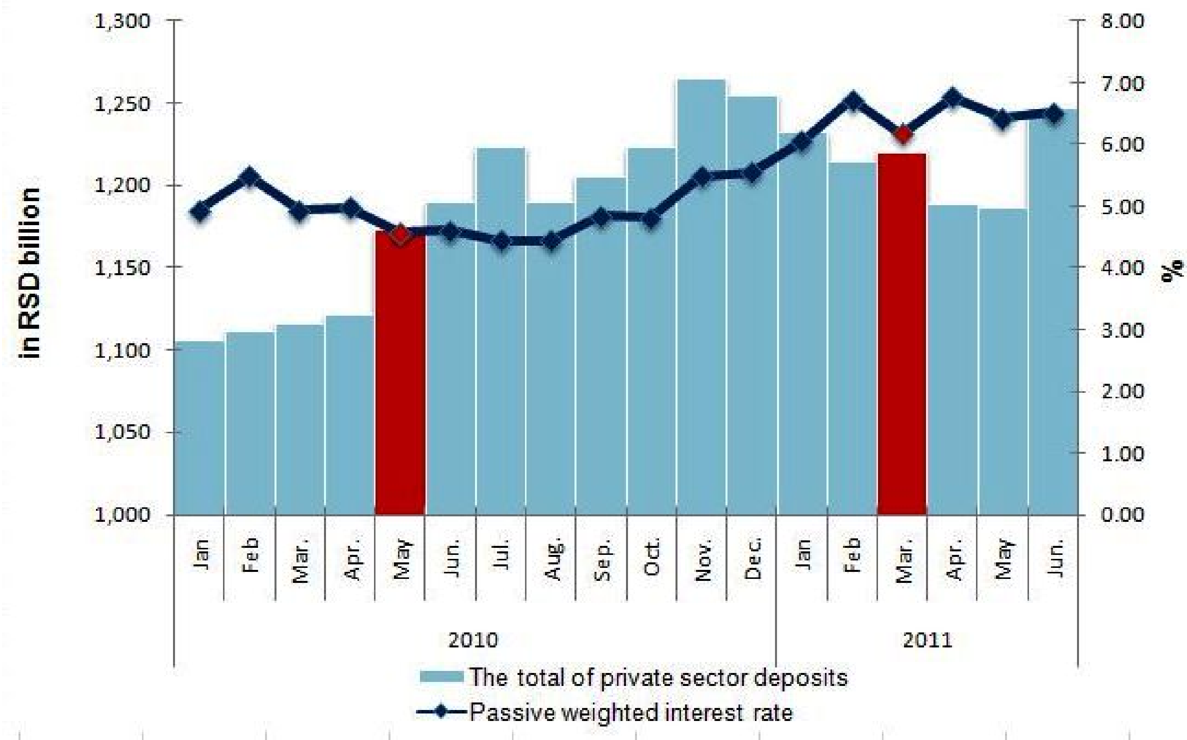
Movement of the level of placements and active weighted interest rate on loans to private sector



Source: *Statistical bulletin of the NBS*

2. **The rate reduction influences the banks' activities of in terms of collecting deposits.** After the rate relaxation, this source of placement became cheaper and the banks therefore may decide to collect a larger amount of deposits for further placement, through a slight increase in passive interest rate. On the other hand, if the domestic sources are not a priority, the banks will transfer the portion of obligatory reserve expenses to depositors, through reduction in passive interest rates. Direct effect of the correction of required reserve system is not visible again.

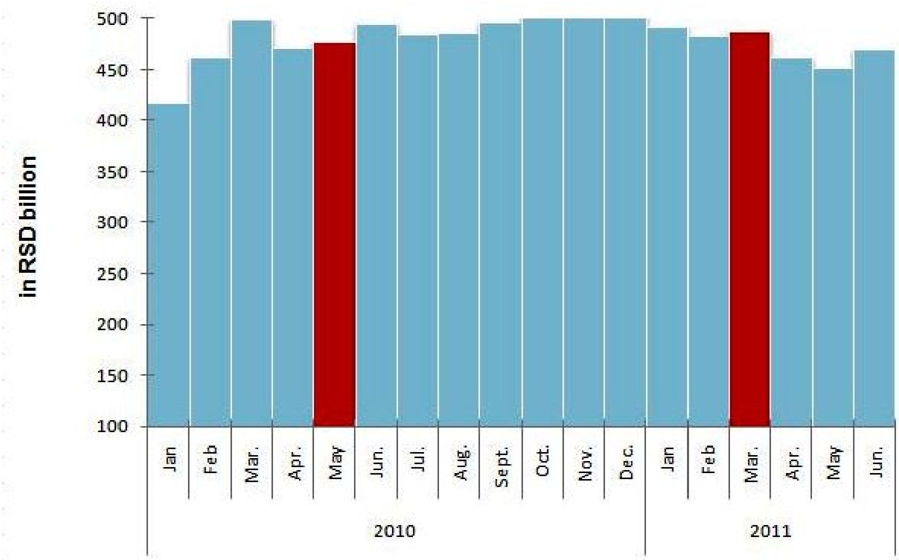
Movement of the level of deposits and of the passive weighted interest rate on the private sector deposits



Source: *Statistical bulletin of the NBS*

3. **The rate reduction also influences the banks' foreign borrowing policies.** Focusing on foreign sources primarily contributes to improvement of the banks' maturity adjustments. Correction of the system did not exert significant influence on this category as well, because a large number of banks have no possibility of long-term borrowing abroad.

The level of the banking sector foreign loans



Source: Statistical bulletin of the NBS

Influence of the required reserve rate relaxation

Variable	*Expected influence*	*Influence of relaxation in the previous period*
Credit activity	Increase	No influence
Active interest rates	Decrease	No influence
Passive interest rates	Increase/Decrease	No influence
Banks' borrowings abroad	Increase	No influence

Therefore, the necessary correction of the required reserve rate will not have a pronounced effect on the solution to the problem of the private sector liquidity until the high level of credit risk, which has the greatest impact on the banks' aversion to increase the volume of lending, is mitigated. On the other hand, the rate reduction will have a direct impact on the level of the country's foreign currency reserves, so the question arises as to whether there is macroeconomic justification for adjustments to be conducted at this time. Monetary authorities had previously shown that they were actively reviewing the established system of required reserves and that they were carefully balancing between the competing demands under direct influence of the system - the maintenance of stability and strengthening of the economic activity.