# ASPECTS REGARDING THE INTEREST RATES FROM THE BANKING SYSTEM FROM ROMANIA 

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#### Abstract

The authors of this paper present some significant elements of the interest rate, which performs an important function in the banking system. Are presented the interest rates of NBR (monetary policy interest rate and ROBOR rates), as well as the interest rate on new loans and deposits in lei. If money represents the blood supplying the economic system, the interest rate represents the rhythm at which it evolves. The interest rate represents the main element according to which the interest is calculated.


Keywords: bank, interest rate, credits, deposits

## INTRODUCTION

One of the monetary policy instruments used by the National Bank of Romania is the interest rate (the reference rate) [7].

The interest rate is used by banks as a way of obtaining income, respectively profits, from the activity of mediating the demand and the supply of capital. Banking activity involves operating with non-government clients, with other credit institutions from the banking system and the central bank, setting differentiated interest rates for each category [1].

In the literature, there are a variety of ways of expressing the interest rate, the most relevant ones being:

- interest rate represents the amount of money that is paid for a loan, representing a certain percentage of the loan amounted [16];
- interest is the price paid for the use of a sum of money over a period of time, that is, the amount the borrower has to pay to the lender for the amount of money borrowed;
- interest is the "price" of the borrowed capital, studied in absolute and relative magnitude [4, 9];
- the interest rate represents the price to be paid, within a contractual term, for the immediate acquisition of a certain number of monetary units [5].

Interest rate is a market phenomenon. The size of the interest is set on the market according to capital demand and supply and depends on a number of economic and policy factors (the size of inflation). Because of inflation, it has moved from fixed interest to variable interest, which is usually calculated at 3 months depending on market interest rates. So, the lender protects of the loss that would result for him from setting a fixed interest rate on the granting of the loan during a period of interest increase

The banking system uses $[3,9,8]$ :

- simple interest, used when the periods for which it is calculated are less than one year; in this case the related interest is collected and not capitalized
- composed interest, used when the periods for which it is calculated are longer than one year and the interest is capitalized (is paid interest on interest)

The interest rate is variable in time, its size and dynamics being the result of several factors with direct or indirect influences such as: the rate of return, the ratio of loan capital demand and supply, the risk for the borrower, inflation, the duration of the loan, government policy $[2,3]$.

The rate of profit must be higher than the interest rate, otherwise entrepreneurs will not borrow credits because, from their capitalization through investments, they should
consume the entire profit or even more to pay interest, which would make their activity unprofitable.

The ratio between the demand and offer of loan capital is a direct and important factor for the interest rate. In the situation where we have a market with perfect competition, the increase in capital demand implies an increase in the interest rate and vice versa.

The risk for the borrower. If the possibility of returning the borrowed capital is higher, the risk is lower and the interest rate lower. If the risk is higher than the interest is higher.

Inflation causes the rise of the interest rate to compensate the reduction of purchasing power of money but can also lead to an increase in the supply of borrowing capital, having as affect the tendency of decrease the interest rate.

The evolution of the interest rate is also influenced by government policy. If on the borrowing market the interest rate increases as a result of the action of some factors, the government may intervene to stop this process by setting a maximum interest rate ceiling. The effects of the intervention may be contradictory: those applying for loans will increase their claims at a low interest rate; bidders discouraged by interest rate cuts will reduce credit offer, which will cause an unsatisfied loan demand even if money is available in the economy.

The interest rate is also influenced by the economic conjuncture, so in times of economic relaunch, to increase investments, the interest rate decreases, while in times of recession it increases [6].

The interest rate of monetary policy (RMP) is the interest rate that is used for the main market operations and is part of the National Bank's Monetary Policy. The monetary policy of a central bank has an important influence on the amount of currency in circulation, foreign exchange rate, market interest and other indicators in order to achieve the objectives of economic policy [17].

The interest rate on the deposit facility is one of three interest rates that the ECB sets every six weeks in its monetary policy decisions. The rate defines the interest rates that banks receive for overnight deposits at the central bank [12].

Lombard loans are a facility through which the NBR provides liquidity in lei to commercial banks in the short term, credit granted by pledging of financial titles easy to be converted into liquid money [18].

The interest rates specific to permanent facilities granted by the NBR (the deposit facility and the credit facility) form a symmetrical corridor in relation to the interest rate of monetary policy. [11]

According to bank language, ROBOR is a reference indicator for interest rates on loans in lei. A bank uses ROBOR (Romanian Interbank Offer Rate) in order to calculate interest rates at the rates that borrowers pay monthly.

A bank uses ROBOR at 3 months or 6 months in order to calculate interest rates at the rates paid by borrowers every month, adding a margin that they set according to the risk they think they assume when grants the credit. It is established based on the information provided by the first 10 banks in the market. Some banks sometimes have surplus of money (cash) and others need money. Therefore, banks borrow each other according depending on their needs and on these loans apply interest rates. The less are money in the market, the more they become more valuable, so their interest rates will increase [11, 13, 15].

ROBOR is an average rate of interest at which the banks from Romania borrow between them, calculating daily as the arithmetic mean of the quotes practiced by the top

10 banks selected by the National Bank. In other words, the greater the need for money is, the higher the average interest rate is, so the ROBOR automatically increases [10].

## MATERIALS AND METHODS

The research methods used by the authors consisted in consulting a rich bibliography from the literature and include books, articles and papers, reports and statistical data provided by the National Bank of Romania. The collected data was analyzed, processed and represented graphically with a series of conclusions.

## RESEARCH RESULTS

The monetary policy rate, being the highest interest rate at which the NBR attracts weekly deposits from the money market, directly influences the amount of currency in circulation. Thus, when it decreases the money supply goes down, monetary policy is considered expansive and acts as an incentive for the economy, commercial banks, the population and companies benefiting from lower loan rates. Conversely, when the interest rate rises, money supply decreases, monetary policy is considered restrictive, access to credit is hampered by rising rates, population and business consumption declining, which leads to a moderation in economic growth.

The National Bank of Romania decided to increase the monetary policy rate (Table 1) at the level of 2.50 percent yearly from 2.25 percent yearly starting on May 8, 2018.

At the same time, the central bank's management also decided to "raise the interest rate for the deposit facility to 1.50 percent per year from 1.25 percent per year and the lending facility's interest rate to 3.50 percent per year to 3.25 percent per year starting on May 8, 2018 [11, 14].

Table 1.

## The interest rate of monetary policy and interest rates related to the permanent facilities granted by the NBR

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| Date | Policy rate | Lending facility | -\% per year - |
| Jan.2017 | 1.75 | 0.25 | 3.25 |
| Feb.2017 | 1.75 | 0.25 | 3.25 |
| March.2017 | 1.75 | 0.25 | 3.25 |
| Apr.2017 | 1.75 | 0.25 | 3.25 |
| May.2017 | 1.75 | 0.25 | 3.25 |
| Jun.2017 | 1.75 | 0.25 | 3.25 |
| July. 2017 | 1.75 | 0.25 | 3.25 |
| Aug.2017 | 1.75 | 0.25 | 3.25 |
| Sep.2017 | 1.75 | 0.25 | 3.25 |
| Oct.2017 | 1.75 | 0.50 | 3.00 |
| Nov.2017 | 1.75 | 0.75 | 2.75 |
| Dec.2017 | 1.75 | 0.75 | 2.75 |
| Jan.2018 | 2.00 | 3.00 | 1.00 |
| Feb.2018 | 2.25 | 3.25 | 1.25 |
| March.2018 | 2.25 | 3.25 | 1.25 |
| Apr.2018 | 2.25 | 3.25 | 1.25 |
| May.2018 | 2.50 | 3.50 | 1.50 |
| Jun.2018 | 2.50 | 3.50 | 1.50 |
| July.2018 | 2.50 | 3.50 | 1.50 |
| Aug.2018 | 2.50 | 3.50 | 1.50 |
| Sep.2018 | 2.50 | 3.50 | 1.50 |
| Oct.2018 | 2.50 | 3.50 | 1.50 |

Source: Authors' table based on the data from http://www.bnr.ro [11]
The NBR could raise its monetary policy interest rate to $3 \%$, compared to $2.50 \%$ at present, by the end of 2018.

The National Bank of Romania (BNR) decided to maintain monetary policy interest rate at $2.50 \%$ by October, as well as deposit facility interest rates at $1.50 \%$ and of the one for lending facility at $3,50 \%$.

New loans in national currency (Table 2) were granted at an average rate of $5.92 \%$ in 2015 reaching a maximum of $6.57 \%$ in February 2015. The average of 2017 on new loans in lei was $5,66 \%$, the maximum being in May, $6.05 \%$. The year 2018 started with a $6.42 \%$ credit rate with maximum in August, of $7.43 \%$.

In the case of new deposits in lei, the interest rate decreased from $1.70 \%$ in January 2015 to $0.93 \%$ at the end of the year, following a downward trend, registering values below $1 \%$ in 2016 and 2017.

Interest rates offered by banks for new deposits in lei recorded a first increase of over $1 \%$ in October 2017, a growth that was maintained at the beginning of 2018, reaching $2.25 \%$ in July, after the NBR moved to a management more stringent of bank liquidity.

Table 2.
Interest rates on loans and new deposits in lei from the banking system -\% per year -

| Date | New loans in lei | New deposits in lei | Date | New loans in lei | New deposits in lei |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Jan. 2015 | 6.36 | 1.70 | Jan. 2017 | 5.15 | 0.54 |
| Feb. 2015 | 6.57 | 1.60 | Feb. 2017 | 5.68 | 0.57 |
| March. 2015 | 6.16 | 1.61 | March. 2017 | 5.83 | 0.54 |
| Apr. 2015 | 6.24 | 1.58 | Apr. 2017 | 5.72 | 0.49 |
| May. 2015 | 5.71 | 1.32 | May. 2017 | 6.05 | 0.49 |
| Jun. 2015 | 5.82 | 1.19 | Jun. 2017 | 5.47 | 0.49 |
| July. 2015 | 5.93 | 1.13 | July. 2017 | 5.40 | 0.50 |
| Aug. 2015 | 5.66 | 1.21 | Aug. 2017 | 5.39 | 0.51 |
| Sep. 2015 | 5.92 | 1.24 | Sep. 2017 | 5.51 | 0.60 |
| Oct. 2015 | 5.90 | 1.12 | Oct. 2017 | 5.88 | 1.02 |
| Nov. 2015 | 5.53 | 1.10 | Nov. 2017 | 5.94 | 1.11 |
| Dec. 2015 | 5.35 | 0.93 | Dec. 2017 | 5.91 | 1.08 |
| Jan. 2016 | 5.56 | 0.81 | Jan. 2018 | 6.42 | 1.11 |
| Feb. 2016 | 5.90 | 0.76 | Feb. 2018 | 6.63 | 1.11 |
| March. 2016 | 5.78 | 0.72 | March. 2018 | 6.73 | 1.06 |
| Apr. 2016 | 5.60 | 0.68 | Apr. 2018 | 6.98 | 1.33 |
| May. 2016 | 5.66 | 0.71 | May. 2018 | 7.08 | 1.64 |
| Jun. 2016 | 5.79 | 0.73 | Jun. 2018 | 7.07 | 1.93 |
| July. 2016 | 5.68 | 0.61 | July. 2018 | 7.28 | 2.25 |
| Aug. 2016 | 5.63 | 0.62 | Aug. 2018 | 7.43 | 2.12 |
| Sep. 2016 | 5.21 | 0.57 | Sep. 2018 | 7.27 | 2.06 |
| Oct. 2016 | 5.05 | 0.53 | Oct. 2018 | - | - |
| Nov. 2016 | 5.21 | 0.58 | Nov. 2018 | - | - |
| Dec. 2016 | 4.92 | 0.61 | Dec. 2018 | - | - |

Source: Authors' table based on the data from http://www.bnr.ro [11]
According to the unwritten law of free markets, ROBOR interest reflects the supply and demand of money on the banking market: the more money (excess of liquidity in the banking jargon), the more deposit placement offers, so the price of these deposits, that is, the ROBOR, decreases.

Romanians who have to repay personal loans (consumption) in lei, with variable interest, pay a commercial interest negotiated with the bank plus the ROBOR index at 3 months. This index is calculated, for each quarter, as the arithmetic average of the daily allowances of the last month before the quarter.


Source: http://www.bnr.ro[11]
Figure 1. ROBOR rates in 2015


Source: http://www.bnr.ro [11]
Figure 2. ROBOR rates in 2016


Source: http://www.bnr.ro [11]
Figure 3. ROBOR rates in 2017


Source: http://www.bnr.ro[11]
Figure 4. ROBOR rates in 2018
The ROBOR index at 3 months (Figures 1, 2, 3 and 4) reached $1.8 \%$ in October 2017 and 3.22 in October 2018. It accelerated since May, when it reached $2.85 \%$. Experts declare that one of the main factors that led to the ROBOR increase is the lack of liquidity. Meaning, the banks are left with little money available, so they borrow from more expensive banks, at higher interest rates.

Another factor is inflation, ROBOR being generally above the inflation rate. The ROBOR index also depends on other causes. For example, if the state borrows more to finance the deficit of nearly $3 \%$ from the Gross Domestic Product (GDP), then the demand for lei increase and, implicitly, the ROBOR increase.

ROBOR also depends on the amount of money coming out of the country. If multinationals from our country want to give bigger dividends to their parent groups, then
they have to change the lei won in Romania on the euro. In this case, the trend is reverse and ROBOR decreases. If the inflation rate increases, so does the ROBOR.

## CONCLUSIONS

Interest rises favor credit growth, but it also creates conditions for larger bonuses for depositors. The expensive increase in lending could come as a result of rising the borrowing costs for commercial bank from the NBR (credit facility increase), but also through the creation of a new ROBOR growth area, which is important in the calculation of variable interest in lei. On the other hand, commercial banks can give depositors greater interest on the money saved, because banks also benefit from a higher deposit facility.

In 2018 ROBOR continued its ascendancy in a sustained way, in particular, under the influence of accelerating the rise in inflation, along with other factors. If we were to take into account in relative terms, compared to 2016, the benchmark indices on the interbank money market in 2018 has tripled.

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