EVOLUTION OF INTEREST RATES RELATING TO BANK LOANS AND DEPOSITS IN ROMANIA

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Abstract. It is widely known that the level of interest rates related to loans is of primary importance, especially when it comes to the relaunch of growth in the Romanian economy. Depending on the size of the installments, the crediting of the investments can be made to a lesser or greater extent. The exit from crisis and also the relaunch of the economic growth will be unlikely without the investments secured through credits. Bank deposits are a source of financing for bank loans. I also considered as enlightening the prospect of presenting the difference between the level of interest on granted loans and those for established deposits.

Keywords: loan interest rate, deposit interest rate, bank loans, bank deposits

INTRODUCTION

It is certainly not an exaggeration to state that "money makes the world go round", because modern economies cannot be functional without money [4,6,17].

Banks face a multitude of banking risks that require assessment and management [3].

Interest rates are used by the central bank to influence monetary policy, with the aim of controlling inflation in particular [16].

The central bank may have control over short-term interest rates, but the real economy will be influenced by the medium- and long-term interest rates applied by commercial banks for loans granted to or deposits drawn from customers [12]. The level of loans depends on the monetary policy interest rate, but also on a number of other factors (inflation, economic growth, etc.), and influences decisions on savings, consumption or investments. Lower interest rates will stimulate investment and consumption at the expense of saving, and high interest rates encourage saving, reducing investment and consumption on the short term [9,11,13].

By Government Ordinance 13 of 2011, the aspects regarding the legal remunerative and penal interest in the situation of monetary obligations, as well as the regulations for the financial-fiscal measures related to the banking sector, were established [19]. Thus, the remunerative interest constitutes the interest that is owed by the debtor of the obligation, that is, a sum of money at a certain term that will be given and that is calculated for the periods prior to the fulfillment of the obligation's maturity. Penalty interest is the interest that is owed by the debtor of the monetary obligation for the failure to fulfill that obligation when due [1,2,13].

Banks set interest rates on loans considering the demand for loans and deposits [7]. Various ways of expressing the interest rate were developed, after consulting the specialized literature. The most relevant ones are those presented as follows:

• the interest rate is the amount of money that is paid for loans, i.e. a certain percentage of the loan [18];

- Dardac and Barbu define interest rate as the way in which the borrower repays the loan, when the borrowed capital is used. Interest, according to this point of view, is the "price of borrowed capital", studied in relative and absolute terms [5];
- According to Jesús Huerta de Soto, the interest rate represents the price that will be paid at a term established by the contract signed with the banking institution, to obtain a certain number of monetary units [8].
- Rothbard defines the interest rate as the price of goods at the present moment expressed in the goods at future moments [10].

The objective of the paper is to present the importance of the interest rate mechanism practiced by credit institutions, as part of the monetary policy transmission mechanism identified in specialized literature, along with the credit mechanism and other specific mechanisms.

MATERIALS AND METHODS

The paper identifies and analyzes the evolution of interest rates for loans granted to the population and financial companies and their deposit rates.

Commercial banks carry out lending operations mainly based on the money sources obtained through attracted deposits. Two groups of banking operations are highlighted:

- assets, which include lending and operations with securities, and we can characterize them by the repayment term, the method of interest payment, the method of repayment, guarantees and type of debtor.
- liabilities, mainly represented by the attraction of deposits, loans but also the issue of securities. Variations in the interest rate determine the appearance of risks when the interest rate changes on the financial market, which creates the conditions for a decrease in income from interest and commissions and/or an increase in interest expenses.

Changes in interest rates can cause changes in the income received by banks from interest but also in the balance sheet values of the assets and liabilities that belong to them.

The data presented by the authors in this paper were collected from the statistics of the National Bank of Romania, as well as the monthly Bulletins in the period 2014-2021. Based on the collected information, the authors performed their own calculations and interpreted, as well as produced a series of tables and diagrams.

RESEARCH RESULTS

The interest rates charged by credit institutions to non-bank customers have recorded mixed developments in the period 2014-2023.

From the analysis of the average interest rates of credit institutions practiced in relation to non-financial companies and households, we mention the particularities below.

The level of average interest rates for loans granted to households is actually the price paid by the population, the one attracted by loans.

The analysis carried out at the level of the average interest rates on the segment of loans in lei granted to households, existing in the balance, shows that they decreased until 2017, then increased in the following years, except for the years of the Covid 19 pandemic (Table 1). The level of average interest rates for lei balance loans granted to the population was higher than the average interest rates for lei balance loans for non-financial companies, with oscillating developments, it having decreased and increased in the analyzed interval.

As for the average rates of outstanding loans in euros, the evolution is similar to those in lei, but the level was lower than that of the average interest rates for loans in the national currency.

Credit institutions obtain over 80% of income from interest charged for loans granted to the population, and have the largest weight in the amount of operational income justified by the existence of credit risk.

Average loan interest rates

-% per vear -

Table 1.

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	Years										
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Loans in lei balance											
Households of the population	9.47	7.56	6.57	6.79	7.95	7.69	6.83	6.24	8.76	9.22	
Non-financial companies	5.93	4.71	4.04	4.83	5.94	5.81	4.80	4.81	10.20	8.95	
New loans in lei											
Households of the population	7.27	6.61	6.57	7.27	8.09	7.60	6.67	6.02	9.40	8.58	
Non-financial companies	5.87	4.36	3.72	4.93	5.84	5.79	4.64	4.58	9.93	8.69	
Loans in euro balance											
Households of the population	5.10	4.70	4.34	4.26	4.20	4.07	3.96	3.85	5.76	8.11	
Non-financial companies	4.32	3.85	3.42	2.93	2.68	2.60	2.55	2.42	4.00	6.34	
New loans in euros											
Households of the population	4.42	4.01	4.11	3.89	4.84	3.87	4.07	3.18	4.75	7.58	
Non-financial companies	3.93	3.20	3.05	2.55	2.54	2.74	3.01	2.69	4.55	6.59	

Source: NIS [13]

In the segment of the average interest rates of new deposits in lei (Table 2) set up in banks by the population and non-financial companies, the situation is similar to that of the interest rates of deposits in lei balance.

The level of the average interest rate on new deposits expressed in lei made by the population has maintained its downward leading trend for the period 2014-2021, registering increased levels that have an effect on the purchasing power and savings of the population in the last two years, against the background of inflation increase.

Average interest rates on deposits

-% per year-

Table 2.

	Years										
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Deposits in balance lei											
Households of the population	2.92	1.62	1.11	0.90	1.38	1.87	1.82	1.70	6.18	6.47	
Non-financial companies	1.61	0.85	0.52	1.05	2.14	2.20	1.59	1.90	6.78	5.63	
New deposits in lei											
Households of the population	2.78	1.48	0.90	0.80	1.76	1.98	1.54	1.41	7.15	5.90	
Non-financial companies	1.11	0.62	0.44	1.21	2.05	2.36	1.51	2.01	6.50	5.52	
Euro balance deposits											
Households of the population	1.66	0.78	0.44	0.34	0.29	0.20	0.11	0.08	0.76	1.97	
Non-financial companies	1.10	0.52	0.39	0.26	0.21	0.19	0.13	0.10	0.75	2.22	
New deposits in euros											
Households of the population	1.58	0.61	0.34	0.30	0.29	0.16	0.06	0.05	1.10	2.05	
Non-financial companies	0.71	0.27	0.24	0.18	0.12	0.22	0.20	0.07	1.19	3.09	

Source: NIS [13]

The average interest rates of deposits denominated in euros created by the population is lower than that of non-financial companies. The trend of the average interest rates obtained by credit institutions for new deposits in euros is inverse compared to the interest rates on the population's deposits, being subsidized with higher interest rates than the population's.

From the perspective on the analysis of the differences (gap) between the amount of active interest (interest rates for loans granted) and passive interest (granted to customers who set up deposits), we graphically illustrated its evolution for the period 2014-2023. Thus, the gap related to the interest rates of outstanding loans and outstanding deposits, in the national currency, in the segment of households and non-financial companies (Figure 1), registered a similar trend in general.

The differences in interest rates on outstanding loans granted to households and outstanding deposits constituted in lei fell within a fluctuation of 6.55 percentage points in 2014, reduced to 5.94% in 2015, 5, 46% in 2016, 5.89% in 2017, and a downward trend to 2.58% in 2022 and 2.75% in 2023.

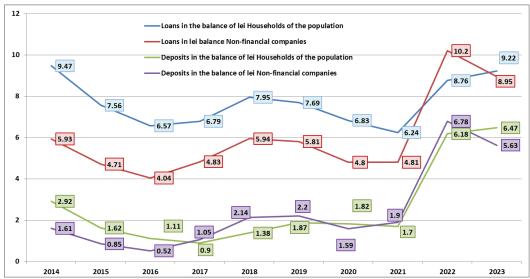


Figure 1. The evolution of the difference between related interests of loans and deposits in the balance in lei, in the 2014-2023 period (%)

Source: Based on NBR data, Monthly Bulletins, 2014-2023

As regards the differences in the interest rates of loans in lei in balance granted to financial companies and the established deposits, they fell between 4.32% in 2014, 3.86% in 2015, 3.52% in 2016, the slight increase in year 2017 to 3.93%, and decrease to 3.21 percent in 2020, 2.91 in 2021, and slight increase to 3.42% in 2022 and decreasing to 3.32 percent in 2023.

Regarding the differences in the level of interest rates related to new loans and new deposits, in the national currency, both in the segment of households and non-financial companies (Figure 2), the recorded evolutions were tortuous. In the household segment of the population, the trend follows an increase from 4.49 percent in 2014 to 5.13 in 2015, 5.57 percent in 2016, 6.33 in 2018 and a decrease in 2020 to 5.13 percent in 2022 to 2.25 percent and a slight increase of 2.68 in 2023.

A downward trend (Figure 2) is also maintained in the segment of non-financial companies, between the point 2014 with 4.76 percent and the final point 2023 with 3.17 percent. Between the two points, the biggest restriction was in the years of the Covid 19 Pandemic, with a minimum of 2.57 percent in 2021.

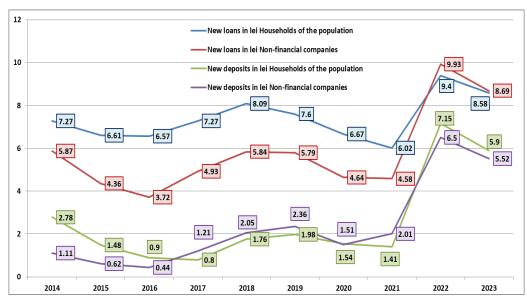


Figure 2. The evolution of the difference between related interests of new loans and deposits in lei, in the 2014-2023 period (%)

Source: Based on NBR data, Monthly Bulletins, 2014-2023

The differences between the interest rate of loans in the balance and those of the deposits in the balance, in euros, for households and non-financial companies are illustrated by figures 3 and 4.

Regarding the differences calculated on the interest rates of loans granted to households and deposits, they were around 3.44% in 2014, followed by a reduction to approximately 3.9% in the 2015-2020 period and an increase in 2022 of 5% and 6.14 percent in 2023.

The difference between interest rates for loans in euros in the balance granted to non-financial companies and their deposits had an oscillating evolution from 3.22 percent in 2014 to 2.67 percent in 2017, a slight decrease in 2019 to 2.41% and 2.32% in 2021 and a growth trend to 3.25% in 2022, and in 2023, 4.12%.

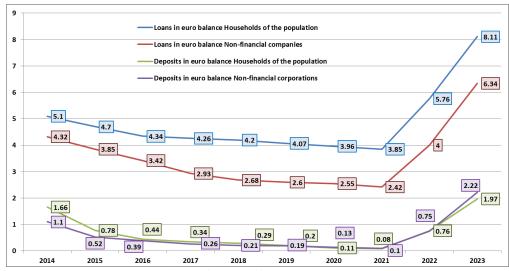


Figure 3. The evolution of the difference between related interests of loans and deposits in euro, in the 2014-2023 period (%)

Source: Based on NBR data, Monthly Bulletins, 2014-2023

The resulting differences between the interest rate of new loans and new deposits in the euro currency, taken separately for the population and non-financial companies as well (Figure 4), had a tortuous evolution.

In terms of interest rates for loans granted to households and related deposits, the differences fell within the range of 2.84 percent in 2014, increasing to 3.77 percent in 2016 and decreasing to 3.59 percent in 2017, advance to 4.55 percent in 2018, followed by an expansion to 5.53 percent in 2023.

The situation of differences in non-financial companies was similar, so that the downward trend was maintained between the years 2014, when it was 3.22 percent, in 2017, it fell to 2.37 percent, and from 2019 the evolution kept winding, having an increase to 2.58 percent in 2021, to 2.62 percent and an increase to 3.5 percent in 2023.

Banks must focus more on loans granted more to companies and less to households, in order to maintain a healthy economic growth.

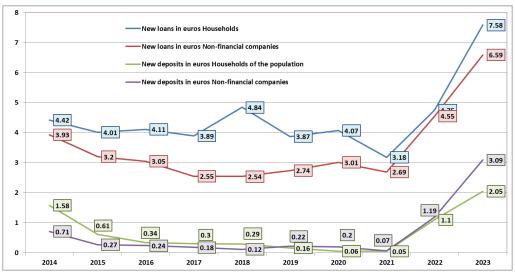


Figure 4. The evolution of the difference between related interests of new loans and deposits in euros, in the 2014-2023 period (%)

Source: Based on NBR data, Monthly Bulletins, 2014-2023

Ample positions have been taken on a problem related to the level of interest rates practiced by credit institutions in their relationship with customers.

The European Commission made a legislative proposal in September 2023 regarding the capping of bank interest on consumer loans by the state, which was implemented by Directive 2225/18.oct.2023 on consumer credit contracts and repealing Directive 2008/48/EC. Article 31 of the Directive introduces measures to limit loan rates, annual percentage rates or the total cost of credit for consumers. Similarly, it will be possible to cap the banks' commissions, including those charged in case of credit non-payment from the debtors, the offering of forbearance measures to the debtors by the banks, before the initiation of forced execution, the establishment of clear procedures by the banks to evaluate the creditworthiness of consumers and to offer them appropriate programs for loan repayment [14,15].

However, it must be taken into account that the beneficial effects of ensuring the protection of borrowers' interests vis-a-vis credit institutions and the profits recorded by them, if maximum ceilings are established on the interest rates of loans granted by banks without differences, depending on the type of lending product, may affect the population's access to credit.

CONCLUSIONS

As an instrument applied by the economic system of credit institutions, the interest rate ensures that they obtain profit. The difference between the interest received and the interest offered is the basis for the profit formation model.

The analysis of the differences (gap) between the amount of active interest (interest rates for loans granted) and passive interest (granted to customers who made deposits) related to interest rates on loans and deposits, illustrated the following trends:

- the difference, in 2023, between the interest rates on loans and deposits in lei, granted to households recorded 2.75% percent, and for new loans and deposits, 2.68 percent, while the difference recorded in interest rates related to loans and deposits in the balance in euros is 6.14 percent, 5.53 percent respectively;
- for financial companies, the differences recorded in the interest rates related to loans and deposits in national currency, from the year 2023, were 3.32 percent for deposits and loans in the balance and 3.17% for new ones, and those expressed in euros, 4.12 percent for outstanding ones and 3.5 percent for new ones;
- the evolution of the differences calculated at the level of interest rates related to new loans and new deposits, in the national currency, both on the household segment and on the non-financial company's segment;
- the differences calculated on the interest rates of loans in euros in the balance granted to households and their deposits recorded decreases, followed by increases, ranging from 3.44% in 2014 to 6.14% in 2023.
- the difference between the interest rates for loans in euros in the balance granted to non-financial companies and their deposits from 3.22 percent in 2014, a decrease in 2019 to 2.41% and an increase to 3.25% in 2022, which had an oscillating evolution, and in 2023, 4.12%.
- for loans granted to households and their related deposits, the differences were between 2.84 percent in 2014, with an expansion to 5.53 percent in 2023.
- the situation of interest rate differences in non-financial companies was similar, so that the downward trend was maintained between 2014 and 2017, and from 2019 there has been an increase to 2.58 percent, in 2021, to 2.62 percent and 3.5 percentages in 2023.

The means for the formation of bank lending resources from the deposits of the population are increasing at the level of the banking system in comparison with the loans that the population receives from them, in the case of higher active interest rates than passive ones, which underlines the important role of the population of net creditor.

A problem of the functioning of crediting and financial systems is related to the gap created between active and passive interest in national economies, and especially to the gap formed between loans in the balance and new ones, in the national currency or euro.

Credit is the fundamental component of the financial system, especially from the perspective of the lender and the borrower, especially as the two actors go through a negotiation process, both having common interests, but also individual contradictory interests.

A favorable economic environment will improve business relations, increase investments and perfect competition, but also advance the rate of absorption of European funds and improve the efficiency and quality of public administration, the legal system, the performance in economic growth in line with the increase in financial efficiency, the reduction, the interest rate on loans, constitute some premises for the improvement of the lending activity of non-financial companies and the population, and the achievement of sustainable convergence, as well as the adoption of the euro currency.

REFERENCES

- [1]. AKINCI O., BENIGNO G., DEL NEGRO M., QUERALTO A., 2021, The Financial (In)Stability Real Interest Rate, R**, International Finance Discussion Papers 1308, Washington: Board of Governors of the Federal Reserve System
- [2]. AKINCI O., QUERALTO A., 2022, Credit Spreads, Financial Crises, and Macroprudential Policy, American Economic Journal: Macroeconomics, American Economic Association, 14(2), 469-507
- [3]. AL-SLEHAT Z. A. F., 2022, Effect of interest rate risk on financial performance the mediating role of banking security degree: evidence from the financial sector in Jordan, Business: Theory and Practice, 23(1), 165–174
- [4]. ANGHEL M.G., 2015, Analiză financiar-monetară, Editura Economică, București
- [5]. DARDAC N., BARBU T., 2009, Monedă, Editura ASE, București
- [6]. FEHER ANDREA, SÎRBULESCU CLAUDIA, SĂLĂȘAN C., PAȘCALĂU R., HARANGUŞ DANIELA, BĂNEŞ A., RAICOV M., 2020, Study on the level of lending to economic sectors in Romania, Lucrări Științifice, Management Agricol, XXII (2), 2013-2018
- [7]. GAMBACORTA L., 2008, How do banks set interest rates?, European Economic Review, 52(5), 792-819
- [8]. HUERTA DE SOTO J., 2006, Money, Bank Credit, and Economic Cycles, 3th edition, Ludwig von Mises Institute, Auburn
- [9]. LUKASA M., NOTH M., 2019, Interest Rate Changes and Borrower Search Behavior, ournal of Economic Behavior & Organization, 163, 172-189
- [10]. ROTHBARD M.N, 2009, Man, Economy, and State, vol. I, Ludwig von Mises Institute, Auburn
- [11]. SÎRBULESCU CLAUDIA, PÎRVULESCU LUMINIȚA, IANCU T., SÎRBU CORINA, 2014, Study on banking system in România, Lucrări Științifice, Management Agricol, XVI (3), 34-41
- [12]. SIRBULESCU CLAUDIA, PIRVULESCU LUMINIȚA, IOSIM IASMINA, GHERMAN R., IANCU T., 2019, Study regarding the interest rates practiced by the credit institutions and their role in the banking activity, SGEM-Conference Proceeding, 6(1), 461-470
- [13]. *** NBR, https://www.bnro.ro, accessed on 18.01.2024
- [14]. *** https://www.bursa.ro, accessed on 22.03.2024
- [15]. *** https://www.banknews.ro/utile/informatii-despre-credite, accessed on 20.03.2024
- [16]. *** https://www.capital.ro, accessed on 19.03.2024
- $\textbf{[17].} \ \ *** \ https://www.ecb.europa.eu/pub/pdf/other/whypricestabilityro.pdf, accessed on 19.03.2024$
- [18]. *** https://dexonline.ro/definitie, accessed on 19.03.2024
- [19]. *** O.G. nr. 13 din 2011 privind dobânda legală remuneratorie și penalizatoare pentru obligații bănești, precum și pentru reglementarea unor măsuri financiar-fiscale în domeniul bancar, publicată în Monitorul Oficial nr. 607 din 29.8.2011, Available on https://legeaz.net/text-integral/og-13-2011-dobanda-legala-remuneratorie-penalizatorie