Commercial banks are financial institutions which accept deposits from broad public and provide credits to different sectors of economy. The mobilization of savings from temporary free financial asset units and their movement towards credit requiring units through the commercial banks' assistance is another form of indirect financing recognized as intermediation. Intermediation activity bears its own costs.

Accounting and analyzing the spread between posted deposit and lending rates is refered as an assessment of costs of intermediation. The spread between deposit and lending rates should be at level that reflects the risk, normal operating costs and profits.

An assessment of intermediation costs is particularly important for the Albanian banking sector which has newly stepped in the process of privatization of the state-owned banks. Additionally, the data on the intermediation costs can be utilized alongside other macroeconomic factors in setting intrest rates on Lek deposits.

High intermediation costs are usually associated with inefficiency, the lack of competition and other factors that would increase the spread. There are two different methods of measuring the intermediation costs of the banking sector ${ }^{13}$.

The fist is calculated as difference between the average weighted interests on Lek investments (new credits and treasury bills purchased in primary auctions) and the newly posted deposit of the banking sector in domestic currency (method 1. is also refered as ex ante spread), whereas the second method utilizes the financial result data (method. 2 which is also called ex post spread).

[^0]The application of both methods allows us create a view on the level of intermediation costs and the dissemination of the newly entered resource in the banking system.

The coordination of both methods is made to disallow banks coverage of poor performance, concerning to past due and lost loans which would be included as relevant data of this interval ignoring the current situation of banks.

## Method 1.

The fist method is based on the difference ( ex ante spread) between average weighted rates on new deposits in Lek ${ }^{14}$ and the treasury bill and new credit investments of each bank within a month's interval.

The same method also finds application for the banking system on the whole.

The spread between average weighted rates on Lek investments (new lending and treasury bills purchased in primary auctions) and the newly posted deposit in domestic currency of banking sector during 1999 oscillates between 9.24-11.87 per cent values.

The most accurate assessment for the spread is provided by its average level from 1996 until 1999 as quarterly and annual average per each year.

[^1]Table 1. The average spread (in per cent).

|  | Q1 | Q2 | Q3 | Q4 | Annual average <br> rate |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1 9 9 9}$ | 9.94 | 11.20 | 11.54 | 9.95 | $\mathbf{1 0 . 6 5}$ |
| $\mathbf{1 9 9 8}$ | 13.18 | 15.02 | 14.09 | 13.02 | $\mathbf{1 3 . 8 3}$ |
| $\mathbf{1 9 9 7}$ | 17.67 | 18.64 | 12.66 | 15.83 | $\mathbf{1 6 . 2 0}$ |
| $\mathbf{1 9 9 6}$ | 15.26 | 17.24 | 20.46 | 21.83 | $\mathbf{1 9 . 7 0}$ |

From the comparison of data over years, year 1999 results on the lowest average spread either per quarter or annually.

The running process of banking reformation as well $s$ other financial reformations concerning the money and capital market development as well as other operations, which grow the competition amongst market participants, would lead this interval by developing countries' values, by also converging the level of developed countries.


The average weighted rate on the new deposits ${ }^{15}$ in domestic currency has been significantly falling from one year into another, from one quarter into the other, reaching the average from 14.89 per cent in 1998 to 8.23 per cent in 1999.

The change in the average weighted rate on the new deposits in domestic currency over this period was affected by:

## A. I The changing level of interest rates on Lek

## deposits

The constant decline in the level of annual inflation from 8.7 per cent at the end of 1998 into - 1.0 per cent at 1999end made the level of interest rates on Lek deposits remain positive in real terms and by high limits.

This fact as well as the positive effect of other factors provided the conditions

Onward, we will perform an analysis of all factors, affecting spread, which would indicate, whether this banking tendency observed on 1999, came from the good operation of banks, or from the effect of factors unaffiliated to it.
A. The average weighted intrest on the newly posted deposits in domestic currency for years 1998, 1999, has been concisely presented as in the table below:
for the six times decline in the level of obligatory minimum on the three types of time deposit rates during the year, ( 7.5 per cent on 12 -month deposits and 7.25 per cent on sixand three- month deposits).

The reaction toward reducing the obligatory minimum from public banks, followed by the non-public affected decline in average weighted rates on Lek deposits, providing positive effect in the reducing costs of the banks.

Table 2. The average weighted rate on new deposits (in per cent).

|  | Q1 | Q2 | Q3 | Q4 | Annual average rate |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1999 | 11.22 | 9.23 | 6.98 | 5.86 | 8.32 |
| 1998 | 20.37 | 16.35 | 12.31 | 10.56 | 14.89 |

[^2]In addition to the interest level on Lek deposits, the changing interval was also affected by:

## A. II. The change in deposit structure.

The data are on quarterly and annual average.
The effect of the new credit structure, in Lek, is insignificant in this change.

Table 3. The monthly average of the newly posted deposits in Lek, (in millions of Lek).

|  | 1999 |  |  |  |  | Year |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Deposits | T1 | T2 | T3 | T4 | Year | 1998 |
| 12- months | 4.007 | 4.039 | 3.144 | 2.486 | 3.419 | 4.298 |
| 6- months | 1.578 | 1.260 | 1.236 | 1.078 | 1.288 | 895 |
| 3- months | 11.884 | 13.308 | 12.874 | 12.238 | 12.576 | 9.756 |
| Total | $\mathbf{1 7 . 4 6 9}$ | $\mathbf{1 8 . 6 0 7}$ | $\mathbf{1 7 . 2 5 4}$ | $\mathbf{1 5 . 4 8 1}$ | $\mathbf{1 7 . 2 8 3}$ | $\mathbf{1 4 . 9 4 9}$ |
| Current accounts | $\mathbf{9 . 7 3 8}$ | $\mathbf{1 5 . 0 7 2}$ | $\mathbf{1 6 . 7 6 0}$ | $\mathbf{1 8 . 0 4 4}$ | $\mathbf{1 4 . 9 0 3}$ | $\mathbf{1 1 . 1 7 8}$ |

The newly posted deposits in time and current accounts during 1999 have been higher than in 1998. Only in 1999, time deposits had high growing rates each quarter and in the fourth quarter it was noted a decline in the level of the newly posted deposits.

The reverse happened with the new posted deposits in current accounts. These accounts had a constant growing trend each quarter, doubling their level in the fourth quarter compared to the first. Passing higher budget expenditures by different business accounts of private and public companies affected high growth of the new required deposits in the fourth quarter of the year.

Their growing share in the total of newly posted deposits affected decrease in their average weighted rate, effecting reduction of the bank costs.

The new structure of time deposits viewed by quarters of 1999 had almost a stable tendency in three month deposits and a declining share of newly posted deposits of three and six month term.

However the highest decline in the newly accepted deposits is conspicuous by 12-month ones.

Accounting the private banks share in the new deposit aggregate, we note that this banks have increased their new deposit share against the total each quarter, moving by Lek 1,2; 3,5; 2,7; and .5, 4 billion, or 4.4; 10.4; 10.9 and 13.4 per cent respectively for quarter I, II, III, IV.

New bank investments in the system reflect a decline in the average weighted rate on the banking system from quarter to quarter as well as on each quarter of year 1999 compared to 1998 ones.

The level of average rate on performed investments had a constant declining tendency. As annual average it decreased by 9.75 per cent compared to 1998.
(in per cent)

|  | Q1 | Q2 | Q3 | Q4 | annual <br> average <br> rate |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1 9 9 9}$ | 21.16 | 20.42 | 18.52 | 15.81 | 18.97 |
| 1998 | 33.55 | 31.37 | 26.4 | 23.59 | 28.72 |

Let's see the factors, affecting this decline, according to their effect.
B. I. The structure of bank investments according to their risk exposure would be as further estimated below:
(in millions of Lek)

| Items | 1999 |  |  |  |  | Year |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1998 |  |  |  |  |  |
|  | T1 | T2 | T3 | T4 | Year |  |
| Lek credits | 152.49 | 388.20 | 553.13 | 547.38 | $\mathbf{4 1 0 . 3}$ | $\mathbf{1 8 . 9 3}$ |
| Treasury bills | 9689.58 | 10001.74 | 9905.73 | 13848.64 | $\mathbf{1 0 8 6 1 . 3 1}$ | $\mathbf{1 0 5 1 2 . 0 7}$ |
| New investments | 9842.07 | 10389.94 | 10458.40 | 14396.02 | $\mathbf{1 1 2 7 1 . 6 1}$ | $\mathbf{1 0 5 3 1 . 0}$ |
| $\%$ of loans/investments | $1.55 \%$ | $3.74 \%$ | $5.28 \%$ | $3.80 \%$ | $\mathbf{3 . 6 4 \%}$ | $\mathbf{0 . 1 7 \%}$ |

This year, Lek credits have been mainly issued by Tirana Bank, The International Malaysian Bank, FEFAD Bank and Alpha Credit Bank. The main share is occupied by FEFAD Bank and Tirana Bank. The main lending tendency is from 6 months until one year or over three years.

Compared to 1998 the change in the investment structure by risk exposure was with respect to the new credit share in domestic currency against the total investments. Although not so underlying this tendency indicates that banks have started to increase their credit amount in Lek.

The liberalization of credit ceiling at the end of 1999 will release banks from the previous "psychological barriers" for meeting credit requirements of domestic economy. This and the liberalization of time deposit rates in Lek will even more grow the role of market forces in the effective extension of credits to economy.

The abrogation of credit ceiling and the increase of deposit rate flexibility in domestic currency will lead to the improving dissemination of financial resources.

Although, the lending rate to economy was higher than in previous year and the advantage of treasury bill ${ }^{16}$ investments had a growing tendency, treasury bill investments still continued to occupy the main share.

In the new deposit aggregate, treasury bill investments of primary auctions occupy $35,30,30$ and 42 per cent per each quarter, respectively.

Private and joint venture banks have increased their participation in the primary auctions of treasury bills compared to 1998. These banks' investments in treasury bill auction per each quarter of 1999 was about Lek 1,7; 12; 1,2 and 1,7 billion or 17.7; 12; ; 12.1 and 12.3 per cent (on discounted value).

Notwithstanding the growing number of primary market participants and the volume, the private and joint venture banks generally participate the primary auctions, yet it can not be pretended that the market competition between the requirement and the supply is decisive for the treasury bill yield. The monopoly position of the Savings Bank which is also the main market investor affects skewness in this setting. The changing position of this bank will set banks participating the system in equal competitive positions in setting a real market rate between the demand and supply.

## B.II. The effect of treasury bill yield.

The change in time deposit rates in Lek, in state-owned banks should be normally accompanied with change in the same momentum of the treasury bill yields on equal maturities. And so it happened practically. The six times cutting of deposit rates during 1999 affected reducing yield, the year-end level of which reached the lowest citing since 1996 at least.

However, reductions of treasury bill yields have not been instantaneous and on the same levels. This led to a temporary increase of their spread and deposit rates. The spread behavior was variable on different maturities. So, notwithstanding, the suffered change during the year the spread between the treasury bill yield and the time deposit rates on 12-month maturity maintained the same levels either at the beginning or at year-end.

Whereas, we note a growing spread on threeand six-month maturities compared to the early year. Moreover, the three maturities reflect a growing spread tendency between the treasury bill yields and deposit rates. However, this spread is more underlying on the 3 - month maturity. Whereas, in absolute figures, the highest spreads are found by $12-$ month maturity. Chart 2. Illustrates what's above mentioned.

[^3]Chart 2.


The falling rates are higher in average weighed intrest on investments than in the newly posted deposits in domestic currency.

The narrowing spread in 1999 indicates that banks aimed reduction of financial intermediation costs throughout their activity, endeavoring maintenance of the lowest spread they had since 1996.

| Year | Investment annual <br> average rates | Deposit annual <br> average rates | Difference <br> (in per cent) |
| :--- | :---: | :---: | :---: |
| 1997 | 32.05 | 15.85 | 17.38 |
| 1998 | 28.72 | 14.89 | 13.83 |
| Annual change | -3.33 | -0.96 |  |
| 1999 | 18.97 | 8.32 | 10.65 |
| Annual change | -9.75 | -6.57 |  |

Finally, the 1999 spread has been significantly narrowed compared to both years included in the comparison. This spread level compared to its moving levels for developing countries is 34 times higher whereas for more developed countries is $3-5$ times higher.

## Method 2.

The second method (otherwise called ex post spread) consists in the assessment of the financial result for banks and the system through the level of intrest, gross and net margins.

According to the second method ${ }^{17}$, based on the bank financial results for 1999, the banking system appears on better indicators on gross and net margins than in 1998.

[^4]A some times higher spread reality than in developing countries is an aftermath of the high operating expense of the banks and the insufficient competition in the financial sector, etc.

As appears from chart 3, ex post spread in monthly averages either on gross or net margins remained positive mainly in August.

In the table below there are provided monthly averages of ex post spread on intrest, net and gross operating margins either quarterly or annually:

| (in millions of Lek) |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | 1999 |
| Interest margin | 47.6 | 287.8 | 504.9 | 891.1 | 432.8 |
| Gross margin | 200.6 | 269.4 | 625.4 | 948.8 | 511.0 |
| Net margin | 45.6 | -17.1 | 373.3 | 651.2 | 263.2 |

The fact that the monthly ex post spread of intrest margin had a quarterly increase indicates that the banking system had growing tendency toward intrest collections compared to their expenditures. From an average monthly spread of Lek 47,6 million of intrest margin in the first quarter, it reached to Lek 891,1 million in the fourth quarter.

On some exemption, all other operating incomes had a growing tendency, bringing increase of average monthly ex post spread of the gross margin from one quarter to another. After discounting the operating expenditures the level of net margin movements within the system, excluding the second quarter, remains positive on average monthly levels. The increase of their monthly spread in the third and the fourth quarter was an aftermath of the growing intrest collected from other operating incomes meantime that operating expenditures of commercial banks did not recognize significant spread during the year.

## Chart 3.

- recognized the lowest annual spread between the average weighted interests on Lek deposits and new investments. However, this interval is 3-4 times higher compared with developing countries and 3-5 times higher compared with OCDE countries;
- the narrowing spread indicates that participating banks of the system have aimed reduction of intermediation costs throughout their operation, endeavoring maintenance of the lowest spread they have ever had;
- financial result indicators of commercial banks, each specific bank of the system and the entire banking system generally, reached the highest indicators for the first time;
- despite their growing tendency compared to 1998, investments in economy occupy an insignificant share against the treasury bill investments.


Accounting above indicators per specific banks in the system reflects improvement of these indicators for 1999.

From the above analysis, we could say that the banking system during 1999;

Under the circumstances, when the current performance of the financial system does not enable the mobilization of resources through other market forms and the treasury bill yields show a high level, a similar investment type of Lek liquidity has relieved banks' operations, concerning coverage of deposit costs in Lek.

On the other side, this does not serve as an instigation for research work on the management of Lek liabilities on banks' side, taking over the risk expense.

Transition toward indirect instruments of monetary policy- the financial market growth, the growing cooperation between banks, - the increase of financial discipline, - the improvement of payments system, - clearing the balance sheet of state-owned banks from non-intrest assets, - the privatization of the Savings Bank and other reformations of the banking system will promote competition, maintain the financial stability and help in setting optimal spreads between deposit and investment rates where financial
intermediaries should be moving to fulfill their operating expenditures and achieve optimal profit.

The money market deficiency, the portfolio of bad loans and the current operating expense of commercial banks provide lower average rates on new deposits and higher average rates for new investments.

## Suzana Kodra ${ }^{18}$

## Monetary Policy Department

[^5]
[^0]:    13 These both methods utilize the data reported in the central bank, whereas the commercial banks have additional methods to be oriented by the management of funds, different risks etc.

[^1]:    14 New deposits include new deposits posted by the commercial banks over a certain interval (a month) - here is included the reinvestment of deposits matured interim the period.

[^2]:    ${ }^{15}$ The average weighted intrest on new deposits in Lek is the product of the amount of the newly posted deposits by each term and the applicable intrest rate against their total.

[^3]:    ${ }^{16}$ The risk of return is zero.

[^4]:    ${ }^{17}$ The data have been taken from the monthly table of operating income and expenditures prepared by Supervision department. The financial result includes Lek and foreign exchange operations.

[^5]:    ${ }^{18}$ This material has been prepared on the second-tier bank data reported in Bank of Albania according to the international standard methods on the assessment of the average interval. The data accuracy depends on the quality of information and Bank of Albania is not responsible for deficiencies in the data reported.

