

3. PERFORMANCE OF THE BANKING SYSTEM OF THE REPUBLIC OF MACEDONIA

3.1. Capital adequacy

At the end of the first half of 2000, the level of capitalization of the banking institutions in the Republic of Macedonia, quantified through numerous indicators, is as follows:

1. Capitalization ratio, as a relation between the own funds and the assets of banks.

As of June 30, 2000, the level of coverage of the balance sheet activities with the banks' and savings houses' own funds equaled 21.96% which represents an increase of 1.23 percentage points compared to the end of December 1999. Such increase of this indicator in the analyzed period December 1999 - June 2000 is a result of the higher increase in the own funds (6.2%) compared to the increase in the total assets (0.4%) in the same period.

The relatively high capitalization ratio of banks and savings houses in the Republic of Macedonia analyzed through this indicator, is generally a result of the following main reasons:

- permanent activities for recapitalization of banks and savings houses, for the purpose of reaching the prescribed minimum capital requirement. In that light, the entry of foreign strategic investors in Stopanska Banka a.d. Skopje and the recapitalization of the Bank, which has a significant influence on the overall capitalization ratio of the banking system as a whole, should also be taken into consideration;
- inadequate structure of banks and savings houses own funds as a result of the poor supply of other sources of funds and insufficient and inefficient mobilization of funds, primarily households' savings deposits.

The following Table presents the level of capitalization of the banks and savings houses in the Republic of Macedonia as of June 30, 2000:

Table 6

Level of capitalization of the banking system in the Republic of Macedonia as of June 30, 2000

BANKS		Net assets	Reserves for potential losses	Gross assets	Own funds	Guarantee capital	Risk weighted assets	Capitalization ratio (net)	Capitalization ratio (gross)	Capital adequacy
1	2	3	4	5=3+4	6	7	8	9=6/3	10=6/5	11=7/8
1	Three largest banks	44,957,536	6,382,139	51,339,675	5,301,828	5,242,694	31,180,121	11.79	10.33	16.81
2	Remaining banks	27,578,858	3,762,145	31,341,003	10,557,762	10,208,432	19,083,751	38.28	33.69	53.49
3	Total number of banks (3=1+2)	72,536,394	10,144,284	82,680,678	15,859,590	15,451,126	50,263,872	21.86	19.18	30.74
4	Total number of savings houses	783,897	224,635	1,008,532	238,361	243,623	454,956	30.41	23.63	53.55
5	Total (5=3+4)	73,320,291	10,368,919	83,689,210	16,097,951	15,694,749	50,718,828	21.96	19.24	30.94

As of June 30, 2000, the level of capitalization of the three largest banks in the Republic of Macedonia equaled 11.79% and compared to the average rate of capitalization of all banks, it is lower by 10.17 percentage points. The other banks have to an average rate of

capitalization of 38.28%, which is by 16.82 percentage points higher compared to the total average.

The differences in the level of capitalization of separate banks and savings houses are primarily due to several main reasons. Namely, the lower rate of capitalization of the three largest banks is a result of several circumstances: developed and voluminous deposit base and fulfilled minimum capital requirement which enables them to conduct international payment operations and credit and guarantee activities. On the other hand, smaller banks have a more modest deposit base and poorer structure of assets, and are also involved in permanent activities for reaching the prescribed minimum capital requirement. The savings houses have an even poorer deposit base, which according to legal regulations may consist of solely households' deposits. In addition, from the total number of 19 savings houses which until June 30, 2000 operated on the territory of the Republic of Macedonia, 3 are not involved in collecting savings deposits and operate solely with their own funds.

2. Capitalization ratio of banks, as a relation between own funds and total activities of banks, including on-balance sheet and off-balance sheet activities

The conduct of off-balance sheet activities involves a certain level of risk which becomes an increasingly important part in the total risks which the banks undertake during their operations. As of June 30, 2000, banks' off-balance sheet activities had a share of 17% in the total activities of banks. Hence, in the analysis of the capitalization of banks, very important is the calculation of the indicator which links banks' own funds with the total volume of on-balance sheet and off-balance sheet activities. At the end of the first half of 2000 this indicator equaled 18.4% and compared to December 31, 1999 it increased by 1.1 percentage point.

3. Capital adequacy ratio, as a relation between the guarantee capital and the risk weighted assets of banking institutions

In accordance with the Basle standards, the capital adequacy ratio is the most relevant indicator for the level of capitalization of banking institutions, since this indicator has two significant determinants:

1. The guarantee capital which is calculated according to a special methodology determined by the Basle Committee for Banking Supervision and reflects the real capital strength of the banking institutions that can absorb potential losses in case of materialization of risks during banks' operations;
2. The risk weighted assets which reflect the volume of risky operations of banking institutions from the aspect of credits risk and are prepared according to an adopted methodology by determining certain risk weighs for certain parts of the on-balance sheet and off-balance sheet assets. Thus the different weighs for different segments of the on-balance sheet and off-balance sheet assets according to the level of their riskiness are determined to the level of 0 percent, 20 percent, 50 percent and 100 percent.

At the end of the first half of 2000, the total amount of guarantee capital of banks operating on the territory of the Republic of Macedonia amounted to Denar 15,451 million and compared to December 31, 1999 it increased by Denar 1,047 million or 7.3%. Dominant components in the structure of the guarantee capital are equity capital and reserves in the total amount of Denar 16,663 million, followed by current profit discounted by 50% in the amount of Denar 317 million, unallocated profit of Denar 167,6 million and revaluation reserves in the amount of Denar 123,3 million. The total deductible items of these components amount to

Denar 1,820 million, half of which (Denar 921 million) pertain to allocated loan loss provisions. Capital investments with other entities on net basis amount to Denar 466 million, whereas registered uncovered lost transferred from previous years and from the current period amounts to Denar 433 million.

As of June 30, 2000, the risk weighted assets of Macedonian banks amounted to Denar 50,264 million and compared to end December 1999 they remained unchanged. The following table presents the structure of this category in the period December 31, 1999 – June 30, 2000.

Table 7

Structure of the risk weighted on-balance sheet and off-balance sheet assets of banks in the Republic of Macedonia

RECAPITULATION	31.12.1997	30.06.1998	31.12.1998	30.06.1999	31.12.1999	30.06.2000
Risk weighted on-balance sheet assets / Total assets	65.4	70.1	69.3	70.6	55.5	56.8
Assets weighted - 0%	10.3	9.3	9.9	7.9	20.9	17.5
Assets weighted - 20%	30.4	25.8	26.0	27.0	29.6	32.1
Assets weighted - 100%	59.3	64.9	64.1	65.2	49.6	50.3
Risk weighted off-balance sheet assets / off-balance sheet operations	72.0	65.3	71.1	69.1	70.5	66.5
Off-balance sheet assets weighted - 0%	12.9	15.8	12.2	11.6	13.6	15.7
Off-balance sheet assets weighted - 20%	20.2	23.5	20.4	23.7	19.6	22.1
Off-balance sheet assets weighted - 50%	0.4	0.1	0.7	0.8	0.5	0.2
Off-balance sheet assets weighted - 100%	66.4	60.6	66.7	63.9	66.4	62.0

The above Table shows that as of June 30, 2000, active on-balance sheet items which involve a certain level of risk represent 56.8% of the total banks' assets.

At the end of the first half of 2000, the analysis of the structure of the risk weighted on-balance sheet assets of Macedonian banks reveals the dominant share of the on-balance sheet items with risk weigh 100% which represent the item - Other assets⁵, followed by the on-balance sheet items with risk weigh 20% related to claims on banks.

Risky off-balance sheet items participate with 66.5% in the total off-balance sheet activities of banks, which compared to December 1999 represents a decline of 4 percentage points

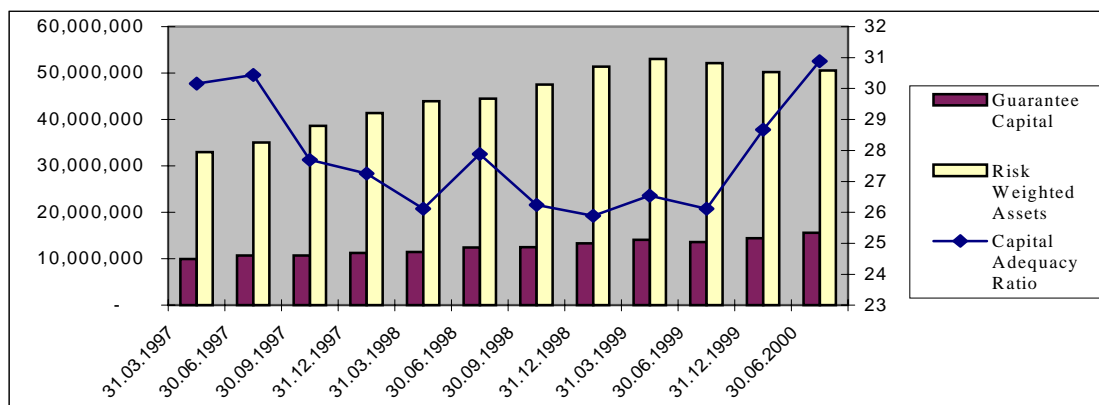
Items with a risk weigh 100% related to uncovered guarantees, letters of credit and other off-balance sheet items still have a dominant share in the structure of the risk weighted off-balance sheet assets. At the end of the first half of 2000, their structural share equaled 62% and compared to end December 1999 it represents a decline of 4.4 percentage points.

As of June 30, 2000, the relation between the guarantee capital and the total risk weighted assets of Macedonian banks renders an adequate average capital adequacy ratio of 30.9%. The fluctuation of the capital adequacy ratio and both its main determinants is presented in the following Figure:

⁵ The item "Other assets" includes all on-balance sheet items excluding those which in accordance with the adopted methodology are included in the positions for which a risk weigh of 0% and 20% is prescribed. Largest items included in "Other assets" are: credits extended to non-financial entities, fixed assets and other claims.

Figure 9

Movement of the guarantee capital, risk weighted assets and capital adequacy ratio



Contrary to the previous years when the capital adequacy ratio registered a moderate downward trend, the Figure above reveals an explicit upward trend of this indicator, commencing in the last quarter of 1999. Namely, as of June 30, 2000, the capital adequacy ratio was higher by 10.8 percentage points compared to September 30, 1999. The comparison to end December 1999 indicates that the increase of this ratio during the first half of 2000 equaled 2.2. percentage points.

The increasing trend in the capital adequacy ratio of the overall banking system in the Republic of Macedonia is primarily a result of the increase in the capital adequacy ratio of the largest bank – Stopanska Banka a.d. Skopje as a result of recapitalization and restructuring of assets in the process of its sale.

Analyzed on a bank by bank basis, the lowest capital adequacy ratio equals 12.6%, which means that all banks in the Republic of Macedonia fulfill the prescribed minimum of 8% of capitalization analyzed through this indicator. In five banks the capital adequacy ratio is below the average level, whereas the other 17 banks reflect a capital adequacy ratio higher than prescribed.

As of June 30, 2000, the average capital adequacy ratio with savings houses equaled 53.5%. Only one savings house has not fulfilled the minimum of 8% of the prescribed capital adequacy.

3.2. Assets quality

One of the most significant problems of the banks in the Republic of Macedonia, also existing in the first half of 2000, is the bad assets quality, i.e. the high credit risk. With the other financial instruments being underdeveloped and banks relying fully on traditional banking functions, assets quality of the Macedonian banks totally depends on the level of credit risk incorporated in their operations. Hence, credit risk plays the crucial role in determining the total financial risk of the banks in the Republic of Macedonia.

Due to the war in the neighborhood and the big external shock that affected the Macedonian economy, the upward trend in the assets quality of the banks, which started in 1996, halted in 1999. As a consequence, at the end of 1999, total credit exposure of the banks classified in the risk categories C, D, and E, went back to the level from the first quarter of 1997.

As of June 30, 2000, the basic indicators of the assets quality of the banks show that it improved slightly in the first six months of 2000. The analysis of the assets quality, i.e. the structure and quality of the credit portfolio of the Macedonian banks, based on the indicators calculated as of June 30, 2000 (Appendix 3) is provided at the end of the text.

A dominant segment of the Macedonian banks' assets, which has a decisive impact on their overall operations, is the credit portfolio. Basic components of the banks' credit portfolio are claims based on credits and interest (regular and non-accrual), other claims which include assuming credit risk as well as off-balance sheet risk exposure. The sum of all these categories, excluding the non-accrual interest, gives the total credit exposure of the banks.

At the end of June 2000 the total credit exposure of the Macedonian banks equaled Denar 50.234 million, and compared to the end of 1999 it is lower by only 0.7%. If the off-balance sheet risk exposure is not taken into account, the share of the remaining part of the credit portfolio in the total gross assets equaled 47% as of June 30, 2000, which is unchanged share compared to the end of 1999.

The analysis of the structure of the credit portfolio indicates that its dominant component are regular credits, with a share of 58.8% at the end of June. Compared to the end of 1999, at the end of June 2000 the share of regular credits in the total credit portfolio is higher by 1.7 percentage points. Following the regular credits, the share of the other components of the credit portfolio is the following: off-balance sheet exposure 19.3%, non-performing credits 14.0%, other claims 5.5% and regular interest 2.5%. In the analyzed period, December 1999 – June 2000, non-performing credits increased their share in the credit portfolio by 2.5 percentage points, which caused an increment in the indicator non-performing credits / regular credits by 2 percentage points. Hence, this indicator equaled 23.8% as of June 30, 2000. The ratio regular interest / regular credits equaled 4.2% and decreased by 0.9 percentage points compared to December 31, 1999.

Very important aspect in the analysis of the performances of the credit portfolio is the quantification of numerous indicators, used to identify the placements of the banks which involve higher degree of risk and cause unfavorable performances of their total risk profile, further deteriorating the liquidity and solvency position of the banks.

As of June 30, 2000, the total amount of claims and off-balance sheet items classified in the risk categories C, D, or E, equaled Denar 19.627 million, representing 39.1% of the total credit exposure, or 127.7% of the guarantee capital of the banks in the Republic of Macedonia. For comparison purposes, at the end of 1999 banks' credit exposure classified in the risk categories C, D, and E, had a share of 41.3% in the total credit exposure, or a share of 145.3% in the guarantee capital of the banks. However, this modest improvement in the quality of the credit portfolio of the Macedonian banks, registered in the first six months of 1999, was not sufficient to overcome the adverse effects of the Kosovo crisis and the severe external shock in 1999. Compared to December 31, 1998, the share of the credit exposure classified in the risk categories C, D, and E in the total exposure of the banks, was higher by 6.2 percentage points at the end of June 2000. Therefore, this indicator shows very high credit risk being incorporated in the operations of the Macedonian banks, which is an indicator of inefficient allocation of the scarce financial resources in the Macedonian economy.

The indicator of the share of claims which are classified in risk categories D and E in the total credit portfolio of the banks equaled 24.0% at the end of June 2000, which is a decrement by 1,1 percentage point compared to the end of 1999. However, compared to the end of 1998, the period before the deterioration in the quality of the banks' credit portfolio started, this indicator is higher by 6.7 percentage points.

If the provisions for credit exposure classified in the risk categories C, D, and E are included in the analysis of the quality and the structure of the credit portfolio, a conclusion can be reached that the uncovered portion of this segment of the risk exposure of the banks equaled Denar 9.213 million as of June 30, 2000, which represented 18.3% of the total credit portfolio, or 59.01% of the guarantee capital of the Macedonian banks. In case a worst case scenario is assumed, where a total credit exposure classified in the risk categories C, D, and E becomes unrecoverable, then 59.01% of the guarantee capital of the banks should be used to cover the losses.

In the Table below, several indicators of the Macedonian banks' credit portfolio are presented, covering the period since 1995⁶:

Table 8

Indicators of the quality of the credit portfolio

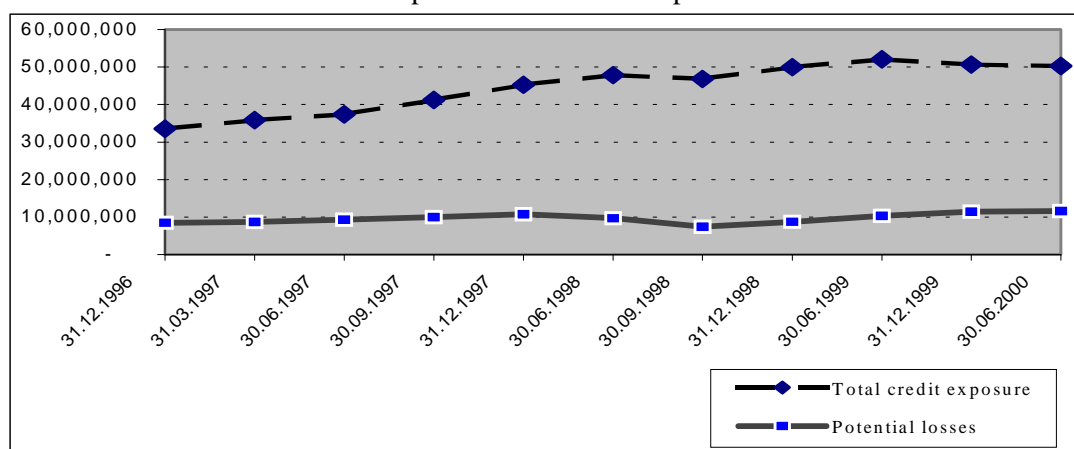
Ratios	31.12.1995	31.12.1996	31.12.1997	31.12.1998	31.12.1999	30.06.2000
% of C,D,E in total credit exposure	44.4	42.8	35.6	32.9	41.3	39.1
% of D,E in total credit exposure	26.8	21.7	24.0	17.3	25.1	24.0
% of C and D in total credit exposure	23.7	29.8	24.5	29.8	34.4	29.1
% of E in total credit exposure	20.8	13.0	11.1	3.1	7.0	9.9
% of riskness (potential losses / total exposure)	30.8	25.4	23.8	17.5	22.6	23.1
% of C,D,E in guarantee capital	133.6	139.4	143.0	123.4	145.3	125.7
% of D,E in guarantee capital	80.7	70.8	96.2	64.8	88.3	77.2
% of C and D in guarantee capital	71.2	97.2	98.5	111.7	120.8	93.8
% of E in guarantee capital	62.4	42.3	44.4	11.7	24.6	32.0
% of net C,D,E in guarantee capital	48.8	65.8	60.9	70.5	74.6	59.0

Rate of risk of the credit portfolio of the Macedonian banks, which represents the ratio of the calculated potential losses to the total credit exposure, equaled 223.1% as of June 30, 2000, which almost corresponded to the risk category B (25%). For comparison purposes, at the end of 1999 this indicator equaled 22.6%, while at the end of 1998 it was 17.5%.

The Figure provided below shows the movement of the credit exposure and calculated potential losses of the banks since the end of 1996.

Figure 10

Movement of the credit exposure and calculated potential losses of the banks



⁶ Appendix 3 provides a detailed Review of certain indicators of the credit portfolio of the banks in the Republic of Macedonia.

In the period December 31, 1996 – June 30, 2000, total credit exposure of the banks increased by Denar 16.780 million, or by 50.2%. In the same period, identified potential losses in the credit portfolio of the banks increased by Denar 3.123 million, or by 36.7%, and at the end of June 2000 reached Denar 11.621 million.

The analysis should take into account that identified potential losses at the end of June 2000 did not correspond to the allocated reserves for potential losses in the aggregated balance sheet of the Macedonian banks. As a result of the conducted on-site supervision examinations, as well as the diagnostic studies for four banks, done by Arthur Andersen, hidden losses are identified, not included in the balance sheets of the banks. Thus, as of June 30, 2000, non-allocated provisions for potential losses (including the amount of not recorded non-accrual interest) are identified with 7 banks, in a total amount of Denar 921 million.

Analyzed on a bank-by-bank basis, the indicator for the share of the claims and off-balance sheet items classified in the risk categories C, D, and E, varies in the range from 0% to 84.6%. With 9 banks this indicator exceeded the average value of 39.1%, whereas with the remaining 13 banks this indicator had a value below the average value for all the banks.

The credit portfolio risk of individual banks was in the range between 2% and 68.6%. Having in mind the average rate of risk in the total credit portfolio of the banks of 23.1%, 8 banks exceeded the average level, while the remaining 14 banks had a rate lower than the average for all the banks.

3.3. Off-balance sheet activities of the banks in the Republic of Macedonia

Development of the off-balance sheet operations, as well as the introduction and development of the various forms of electronic banking, are among the most important trends in the world of developed banking and finance, but the banks in the Republic of Macedonia still rely only on traditional off-balance sheet banking activities: issuance of guarantees, letters of credit and extension of credit commitments. With the financial market in the Republic of Macedonia being underdeveloped, banks are still not involved in operations with derivatives, i.e. operations with futures, forwards, swaps and options. Along the development of the financial markets in the Republic of Macedonia, one should expect substantial increase in the scope of off-balance sheet activities of the banks, aimed at using derivative products, in order to minimize the risks which emerge from the open risk positions of the banks, and to increase the revenue potential of the banks.

As of June 30, 2000, total off-balance sheet assets of the Macedonian banks equaled Denar 14.887 million, and compared to the end of 1999 they increased by 6.27%, while compared to June 30, 1999 the growth equaled 5.84%.

The share of the risk off-balance sheet items in the total off-balance sheet assets equaled 84.3%, which represents a decrement by 2.14 percentage points compared to the end of 1999, whereas compared to the end of June 1999 the decline equaled 4.15 percentage points.

Table 9

In (000) Denars

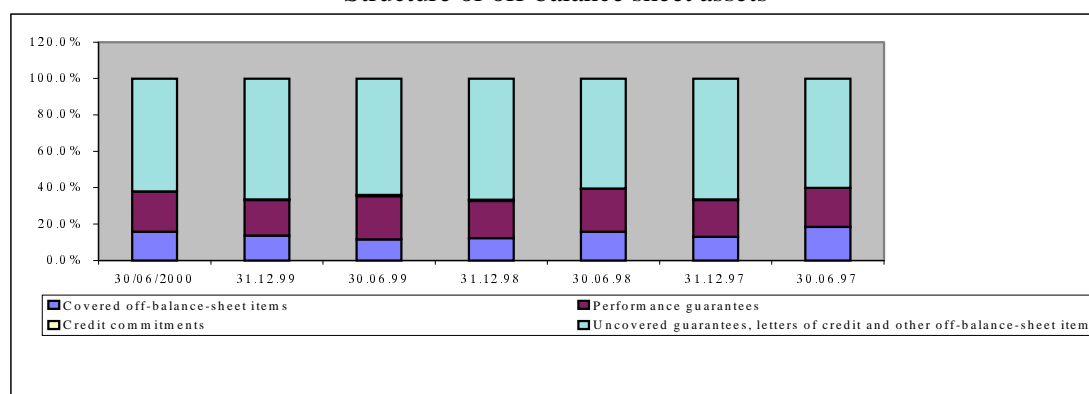
	30.06.00	31.12.99	30.06.99	31.12.98	30.06.98	31.12.97	30.06.97
Covered off-balance sheet items	2,337,709	1,898,993	1,624,998	1,795,349	2,366,553	1,619,656	1,830,271
Performance guarantees	3,297,070	2,744,087	3,336,963	3,005,294	3,523,002	2,531,450	2,132,510
Credit commitments	29,123	65,234	109,582	109,510	15,117	49,274	7,542
Uncovered guarantees and letters of credit	9,223,533	9,299,824	8,993,393	9,825,680	9,065,946	8,319,176	5,979,092
Total off-balance sheet exposure	14,887,435	14,008,138	14,064,936	14,735,833	14,970,618	12,519,556	9,949,415
Risk assets/total off-balance sheet assets	84.30%	86.44%	88.45%	87.82%	84.19%	87.06%	81.60%

The previously presented indicator implies that a significant portion (over 80%) of the total off-balance sheet activities of the banks in the Republic of Macedonia involves a certain credit risk, and could be converted into balance sheet claims.

From a structural point of view, uncovered guarantees and letters of credit had the largest share of 62% in the total off-balance sheet assets at the end of June 2000. Compared to the end of 1999, their share in the off-balance sheet assets is reduced by 4.4 percentage points, whereas compared to the end of June 1999 the decrement equaled 1.9 percentage points.

Figure 11

Structure of off-balance sheet assets



3.4. Analysis of the profitability of banks in the Republic of Macedonia and assessment of their efficiency

3.4.1. Structure of the income statement

The semi-annual statement for 2000, showed that the banks in the Republic of Macedonia realized a positive financial result of Denar 470.6 million, which compared to the financial result in the first six months of 1999, indicates an increment of Denar 249.2 million, or by 112.58%. The sources of the realized financial result in the first six months of 2000, the reasons for its increment relative to the first half of the previous year, and the degree of reality having in mind the real profitability potential of the Macedonian banks, could be identified through a structural and comparison analysis of the aggregated income statement (Appendix 2).

In the first six months of 2000, the **total interest income** of the banks equaled Denar 2.376 million, and relative to the first half of 1999 it increased by Denar 59 million, or by 2.55%. Cancelled revenues based on non-performing interest, as determined by the banks, equaled Denar 730 million, or 30.72% of the total interest income. In case the non-accrual interest in the amount of Denar 110 million, as identified through the on-site examinations, is included, then the real interest income would be Denar 2.266 million.

With regard to the individual components of the interest income, in the first half of 2000 compared to the same period of 1999, interest income from transactions with banks and households increased by 54.52%, and 13.08%, respectively. Contrary to this, interest income from transactions with enterprises, which is a dominant component in the total interest income, decreased by 8.99%.

However, in the first half of 2000 relative to the first half of 1999, **total interest expenditures** of the banks were lower by Denar 8 million, or by 0.66%. The fastest growth is registered with the interest expenditures emerging from the transactions with enterprises, which equaled 10.07% and adding to an increase of the share in the interest expenditures by 4 percentage points. Interest expenditures from transactions with households increased by 15.14%, while their share in the interest expenditures increased by 3.37 percentage points. The fastest decline is realized in the interest expenditures from transactions with banks, which equaled 24.64%, and with the expenditures related to the payment of premia for deposit insurance, which decreased by 23.48%. Simultaneously, the share of interest expenditures from transactions with banks and of interest expenditures related to the payment of premia for deposit insurance, in the interest expenditures decreased by 6.55 percentage points and by 1.18 percentage points, respectively.

As a result of the movements in the total interest income and total interest expenditures, at the end of June 2000, realized net interest income of the Macedonian banks equaled Denar 1.174 million and compared to the same period of 1999 it was higher by Denar 68 million, or by 6.10%. Simultaneously, expenditures emerging from provisions for potential losses are higher by Denar 233 million, or by 28.46%, thus reaching Denar 1.052 million at the end of June 2000. Hence, aggregate income statement of the Macedonian banks showed a **positive net interest income based on provisions**, which equaled Denar 122 million on June 30, 2000. Banks' financial result realized from their basic function, intermediation between the economic agents facing a surplus and those facing a lack of financial resources, where the expenditures based on potential loan losses due to a credit risk identified by the banks are incorporated, is positive. If one takes into account the unallocated provisions for potential loan losses in the amount of Denar 811 million and the non-accrual interest in the amount of Denar 110.3 million additionally identified through the on-site supervision examinations and not incorporated in the balance sheets of the banks, then the net interest income based on provisions becomes negative and equals Denar 799.3 million, resulting in a negative ultimate financial result of the banks' operations.

As of June 30, 2000, the **Other income** category from the aggregate income statement equaled Denar 2.455 million and compared to the end of June 1999 it was higher by Denar 465 million, or by 23,36%. From a structural point of view, the largest component of this category are **fees**, which amounted to Denar 1.165 million at the end of June 2000, and relative to June 30, 1999 they increased by Denar 304 million, or by 35.32%. Other important components in the other income are net income from transactions in foreign currency, which equaled Denar 533 million and had a share of 21.72%, and extraordinary income, which equaled Denar 503 million, and had a share of 20.52%. If one takes into account the financial result of the banks in the amount of Denar 470.6 million, realized in the first six months of 2000, a conclusion could be reached that it was lower than the extraordinary revenues by Denar 33.2 million. This indicator weakens the overall performance in the banks' profitability, because in case the extraordinary income had not been included in the income statement, the

realized financial result of the banks in the first half of 2000 would have been negative. By their nature, the extraordinary income do not reflect the real performances in the profitability as they take place incidentally and are not part of the income from regular operations. At the end of June 2000, Denar 440.7 million, or 87.47% of the total amount of Denar 503.7 million, are related to three banks in the Republic of Macedonia.

In the first six months of 2000, the **Other expenditures** category amounted to Denar 2.106 million which compared to the same period of 1999 represents an increment by Denar 50 million, or by 2.45%. The highest share of 42.14% in this category belongs to the expenditures for wages, which at the end of June 2000 equaled Denar 889 million. Relative to the end of June 1999, when expenditures for wages equaled Denar 810 million, an increment of 9.77% is registered.

From the total number of 21 banks and one branch of a foreign bank, which operated in the Republic of Macedonia at the end of June 2000, 19 realized a positive financial result from their operations, while the remaining three banks realized a negative financial result.

3.4.2. Indicators of the profitability and efficiency of banks

The second level in the analysis of the profitability of the banks in the Republic of Macedonia and assessment of their efficiency, is the calculation and analysis of the basic indicators that reflect the performances in these two aspects of the banks' operations⁷.

The return on average assets (ROAA) calculated as a ratio of the financial result of the banks in the first half of 2000 to the average assets in the same period, equaled 1.3%⁸, implying that 100 units of assets of the Macedonian banks generate 1.3 units of net profit. Relative to the return on average assets of 0.8%, as of December 31, 1999, the ratio in the first half of 2000 is higher, indicating an improvement in the profitability potential of the Macedonian banks.

The return on average equity (ROAE), calculated as a ratio of the realized net profit of the banks in the first half of the year to the average own funds of the banks in the same period, equaled 6.11%⁹, where this ratio equaled 3.5% at the end of 1999.

Another indicator which reflects the profitability potential and the efficiency of the banks is the one which can be calculated as a ratio of operational costs (Other expenditures in the income statement) to the total income (net interest income based on provisions plus other income). As of June 30, 2000, this indicator equaled 0.82, indicating that the Macedonian banks had to assume operational costs in the amount of Denar 0.82 in order to realize one Denar in income. Simultaneously, expenditures for wages in the amount of Denar 0.34 were needed to realize one Denar in revenues.

The ratio of expenditures based on provisions for potential loan losses to net interest income equaled 0.9, showing that in order to realize one Denar as a net interest income in the first half of 2000, Macedonian banks had to assume Denar 0.9 as expenditures for provisions aimed at covering the credit risk from placements.

⁷ Calculations are made based on the aggregate income statement of the Macedonian banks, without taking into account the excluded expenditure based on the additionally determined provisions for potential losses and additionally identified non-performing interest.

⁸ Indicator (ROAA) is given at annual level, i.e. the financial result shown for the first six months is multiplied by 2.

⁹ Indicator (ROAE) is given at annual level, i.e. the financial result shown for the first six months is multiplied by 2.

With the nominal weighted deposit interest rates being unchanged (11.3%), the decline in the nominal weighted lending interest rates in the first half of 2000 (18.8%, or lower by 1.2 percentage points relative to December 31, 1999) resulted in a reduction of the interest margins of the deposit money banks. In the first half of 2000 the interest margins on average equaled 7.5 percentage points, which despite the improvement, indicates that the efficiency of the banking sector is not sufficient. Relative to the end of 1999 interest margins are lower by 1.2 percentage points, while compared to the end of June 1999, they are lower by 1.4 percentage points.

* * *

Another aspect in the analysis of the banks' efficiency is the quantification of several additional indicators, which incorporate the total number of employees, relative to the net profit and relative to the total assets of the banks.

As of June 30, 2000, the total number of employees in the banks and savings houses in the Republic of Macedonia equaled 3.858, which is an increment of 13 employees, or by 0.34% relative to the end of 1999. In addition, the share of the number of employees in the savings houses in the total number of employees in the banking system equaled 2.56%.

The relation between the net profit of the banks and the total number of employees indicated that at the end of June 2000 one employee in the Macedonian banks generated a net profit in the amount of Denar 251 thousand on annual level. For comparison, at the end of 1999 the capacity for generating profit per employee equaled Denar 134 thousand. This indicator shows very low efficiency of the Macedonian banks relative to the banks in the more advanced transition economies, or in the countries from Western Europe.

The indicator: total net assets / number of employees in the banks, confirms the previous conclusion. At the end of June 2000, there were net assets in the amount of Denar 19.312 per employee, which is substantially below the level in the banks of the more advanced countries in transition.

Important aspect in the analysis of the banks' efficiency is the analysis of the employees by their qualifications. For the Macedonian banks and savings houses, it is as follows:

Table 10
Employees in the banks and savings houses in the Republic of Macedonia
by their qualifications

As of June 30, 2000	Total number of employees	Ph.D. and Mcs	%	Univer- sity degree	%	Advanced specialist' s training	%	Intermediat e specialist's training	%	High skilled, low skilled and under skilled	%
Banks	3,756	19	90.5	945	95.8	288	97.6	2,275	97.9	229	98.7
Savings houses	102	2	9.5	41	4.2	7	2.4	49	2.1	3	1.3
Total	3,858	21	100.0	986	100.0	295	100.0	2,324	100.0	232	100.0
%	100	0.5		25.6		7.7		60.2		6.0	

Regarding the qualifications of the employees in the banks and savings houses in the Republic of Macedonia, the Table shows a very unfavorable situation. Two thirds of the employees have a high school degree or some other lower level of education. Share of employees with a university degree equals 25.53%, while the employees with Ph.D. and MSc degree represent 0.54% of the total number of employees.

3.5 Liquidity of banks

As of June 30, 2000 the total highly liquid assets of the banks in the Republic of Macedonia equaled Denar 35.618 million.

Table 11

	30.06.1999	%	31.12.1999	%	30.06.2000	%
Cash and balance with NBRM	3,838,363	18.41	5,730,293	15.93	4,657,368	13.08
Securities rediscounted by NBRM	538,041	2.58	1,718,214	4.78	372,483	1.05
Debt securities	1,104,699	5.3	8,292,233	23.05	8,344,958	23.43
Accounts with other banks	15,368,559	73.71	20,240,550	56.25	22,243,554	62.45
	20,849,662	100	35,981,290	100	35,618,363	100

in (000) denars

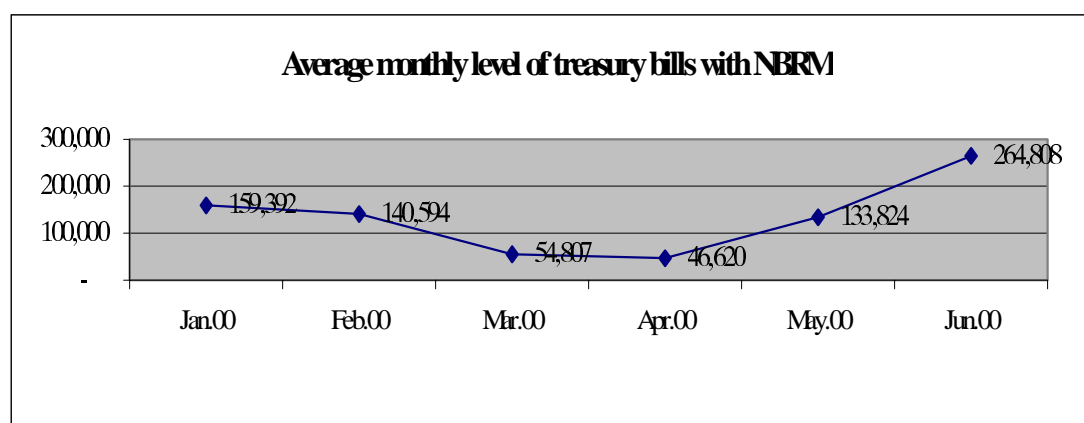
At the end of June 2000, the share of the highly liquid assets in the total assets of the banking system in the Republic of Macedonia was 49.1% indicating stable liquidity performance of the Macedonian banks.

Correspondent accounts with domestic and foreign banks had the highest share in the highly liquid assets, and this is a common characteristics for all commercial banks in the Republic of Macedonia. As of June 30, 2000, their share in the highly liquid assets equaled 62.45%, which is an increment by 6.2 percentage points relative to the end of 1999.

Funds denominated in Denars characterized as highly liquid (Giro-accounts and cash in vault) increased substantially in the first six months of 2000. The average daily balance of the liquid assets in the banks equaled Denar 518 million in the first six months, which is an increment by 30.4% compared to the average for the same period of the previous year. Due to the high liquidity in the banking system in the first half of 2000, banks allocated excess compulsory reserves by 3% on average.

The total amount of Central Bank bills sold at auction equaled Denar 844 million at the end of June 2000, and compared to the end of 1999 increased by 58.8%. On average, in the first six months of 2000, Central Bank bills in the amount of Denar 133.3 million per month were sold.

Figure 12



The high liquidity of banks had a reflection on the interest rates on the Money and short-term securities market. In the first six months of 2000, the weighted interest rate realized on this market equaled 11.2% on average, and relative to the same period of 1999 it was lower by 9.2 percentage points. In the first half of 2000, the average monthly turnover

equaled Denar 1.673 million, and was lower by 15.1% compared to the first six months of 1999. This was due to the faster decline in the demand for liquid assets (by 17.6%) relative to the decline in the supply (by 6.6%).

Figure 13

