



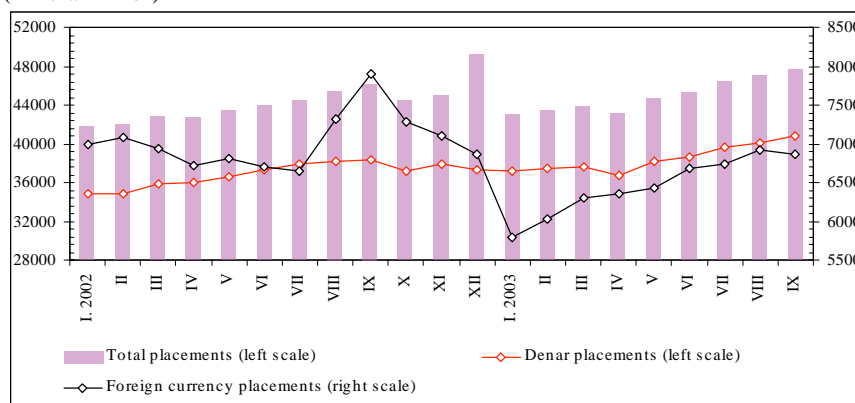
## 2.3.

## Banks' placements and interest rates

*The positive monthly dynamics of the banks' credit activity continues*

The four-month positive monthly dynamics in the total placements continued in September 2003. Thus the banks' total placements went up by 1.4% on monthly basis, with an increase being registered in the Denar placements of 1.7%, while the foreign exchange placements dropped by 0.7%. Such movements were primarily generated from the accelerated long-term lending to both the households and the enterprises. Compared to the same month of the previous year, the banks' total placements are by 3.2% higher.

Chart 23  
Banks' placements  
(in Denar million)



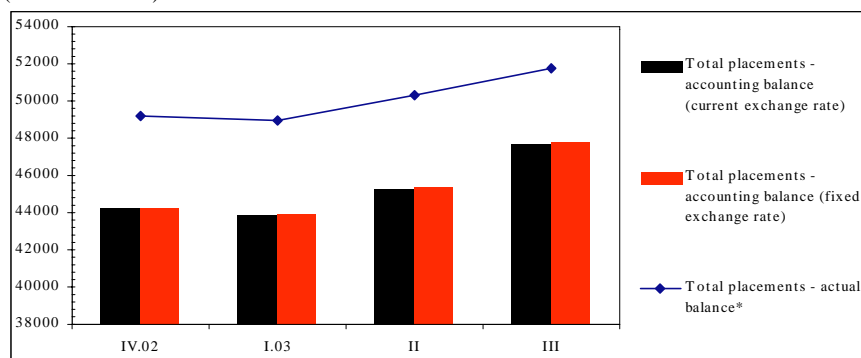
*Monthly increase in the banks' Denar placements of 1.7%*

In September 2003, the monthly change in the banks' Denar placements (growth of 1.7%) represents a combined effect of the moderate increase in the short-term placements and the more intensive increment in the long-term lending. Same as in the preceding month, the dynamics of the placements extended on a short run was caused by the higher amount of overdue claims, with moderate decrease being registered in the short-term lending to the enterprises. On the other hand, the more intensive extension of long-term credits to the enterprises in this month is an adequate support to the economic activity. Simultaneously, the banks strengthen the financial potential of the households through the higher level of long-term credits extended to the households for housing construction and other purposes, aimed at acceleration of the economic growth. With respect to the maturity structure, such movements decreased the share of the short-term placements by 0.8 percentage points (at the end of September 2003, it equaled 64.6%). The share of the lending to the households' sector went up by 0.4 percentage points on monthly basis, and reached 22.9% at the end of the month. The annual growth rate of the Denar placements equaled 6.5% in September 2003.



Chart 24

Quarterly dynamics of the total placements  
(in Denar million)



\* The actual balance of the placements differs from the accounting balance for the respective corrections for written off claims and re-recordings with the banks.

### Estimation of the equation of the Denar credits extended to the non-government sector

The identification of factors, which determine the credit activity of the banks in the Republic of Macedonia, is relatively hindered. The banks' interest rate policy, as one of the fundamental factors that determine the lending still shows relatively high rigidity. Simultaneously, the role of the interest rate is partially derogated given the exploitation of banking credit as a basic source of financing. On the other hand, the shocks of non-economic nature respectively affected the dynamics of lending. The need of further real sector restructuring creates additional difficulties in the estimation of the lending dynamics determinants.

The following equation is an attempt to quantify the effect of some factors on the volume of credits extended by the banks to the non-government sector. The estimation pertains to the December 1998 – June 2003 period, where monthly data are used. All variables in the equation (excluding the interest rate) use differentials of their logarithm values (natural logarithm).

The equation includes the following variables:

**Exogenous variable: DK** (Denar credits of banks extended to the non-government sector, excluding overdue claims)

**Endogenous variables:**

**VD** (total deposits of the non-government sector)

**VT** (total trade turnover)

**BZ** (CB bills)

**IP** (industrial output index)

**RKS** (average weighted short-term lending interest rate, real)

**KD** (banks' credits extended to the Government)

**DUM1** (dummy variable, effect of the 1999 crisis)

**DUM2** (dummy variable, effect of the 2001 crisis)



Table 2  
Denar credits equation

Variable	Coefficient	Probability
VD(-6)	0.085787	0.008
VT(-2)	0.0968	0.0002
BZ	-0.023494	0.0049
IP(-1)	0.035303	0.0255
Costant	0.050944	0.1232
DUM1	-0.004959	0.5932
DUM2	-0.004323	0.4857
DK(-1)	0.299484	0.0122
RKS(-2)	-0.00251	0.1607
KD	-0.030108	0.0013
<b>R<sup>2</sup></b>	0.61	
<b>Adjusted R<sup>2</sup></b>	0.52	
<b>Durbin-Watson statistics</b>	2.05	

The results of the estimated equation indicate significance (level of certainty of 95%) of the obtained coefficients of all included variables, except the coefficients of the dummy variables and the coefficient of the real interest rate. However, the established links between the variables are of a weak intensity or almost irrelevant.

Thus the equation indicates that 1% growth in the banks' deposit potential leads to an increase in the volume of extended credits of only 0.1%, with a time lag of 6 months. Notwithstanding the relevance of the coefficient for the CB bills variable, no significant link has been registered. The coefficient is almost zero, indicating low degree of substitution between the banks' investments in CB bills and their credit activity.

Notwithstanding the negative correlation between the real lending interest rate and the Denar credits, the estimated coefficient is not relevant and its intensity is very weak. However, this result should be interpreted with caution since it pertains to the short-term interest rate, while the credits include those extended on a short and on a long run (the share of the long-term credits in the maturity structure of the total Denar credits equals around 30%).

With lending to the Government by the banking system primarily consisting of investments in Government bonds issued for special purposes, no crowding effect out is expected to occur. Such ascertainment is confirmed by the estimated coefficient.

With respect to the economic activity, notwithstanding the relevance of the obtained coefficients for the total trade turnover and the industrial output (indicators of economic activity), the intensity of the dependence is weak. It is more intensive in the total trade turnover.

The results obtained from the equation should be interpreted cautiously for several reasons: a) exploitation of relatively short time series, the which in case of several shocks of non-economic nature is insufficient to reflect systematic relations; b) the growing role of the savings as a source of lending, the moderate reduction of the banks' interest rate policy rigidity, as well as the larger orientation of the banks to lend to the households (given the diversified supply of credits) are trends typical for the past year, with low probability to affect the results of the empirical research for the overall period and c) the credit activity of the banks in the Republic of Macedonia is under the influence of many other non-

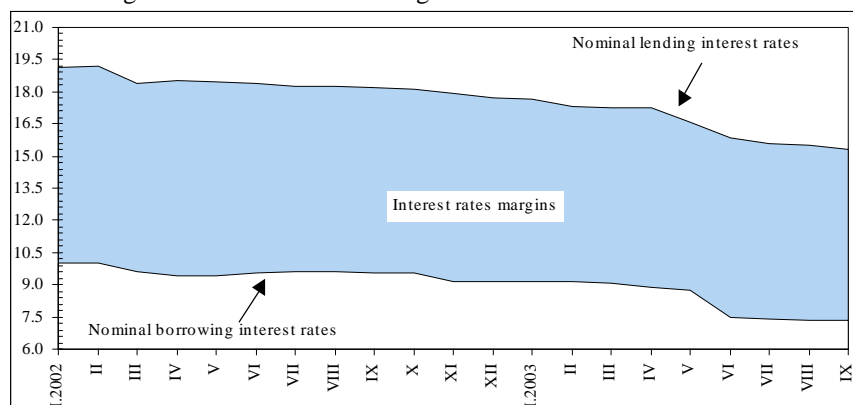


measurable factors (such as the real sector of the economy), which disturb the relations between the lending and the factors which are its common determinants (such as the level of saving, the interest rates and the economic activity).

*Decrease in the foreign exchange placements of 0.7%, given the lower level of overdue claims*

In September 2003, the banks' foreign exchange placements decreased by 0.7% on monthly basis. Given the almost unchanged level of foreign exchange placements extended on a long run, the negative monthly dynamics of the total foreign exchange placements is due to the lower short-term placements (solely due to the lower amount of overdue claims). Consequently, the share of the placements extended on a long run in the maturity structure of the foreign exchange placements went up by 0.4 percentage points, reaching 54.5% at the end of the month. The enterprise sector remains dominant in the sector structure making up 97.4%. On annual basis (September 2003 / September 2002), the total foreign exchange placements dropped by 13.1%. The negative annual dynamics of the foreign exchange placements was partially due to the considerable appreciation of the Denar against the US Dollar<sup>9</sup> (in line with the Euro-US Dollar relation), which resulted in lower Denar equivalence of the foreign exchange placements.

Chart 25  
Banks' weighted interest rates and margins\*



\* Pertain to Denar credits and deposits.

*Inconsiderable changes in the banks' interest rates*

In September 2003, the banks' interest rate policy remained almost unchanged. Thus the banks' Denar average weighted lending interest rate on short-term deposits equaled 15.3%, which is by 0.2 percentage points lower compared to the previous month. The average weighted deposit interest rate (three-month Denar deposit) registered no change on a monthly basis (7.4%). In line with such changes, the interest rate margin was by 0.2 percentage points lower on monthly basis and equaled 7.9 percentage points. With respect to the foreign exchange interest rates, in September 2003, the average weighted interest rate on the short-term foreign exchange placements equaled 7.6%, and remained almost unchanged on a monthly basis. The interest rates on the three-month deposits in Euro ranged from 1.4% to 4.4%, while the interest rates on the three-month US Dollar deposits ranged from 0.7% to 3.8% (p.a.).

### Review of the Stock Exchange activity in the third quarter of 2003

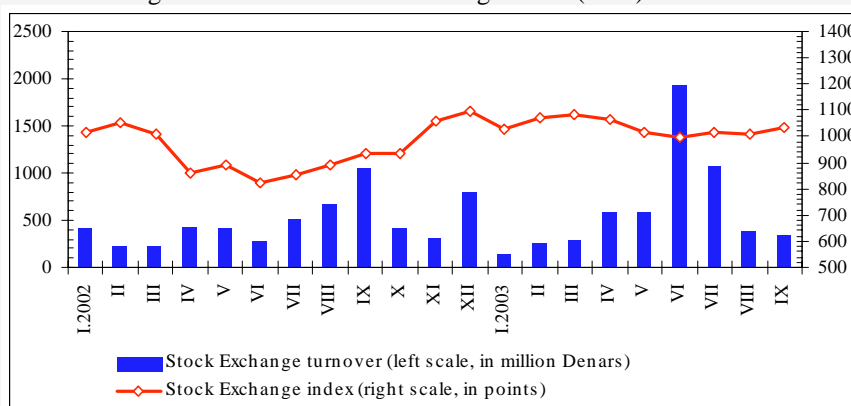
In the third quarter of 2003, the Macedonian Stock Exchange registered total turnover (excluding block transactions and government segment) of Denar 531.5 million, accounting for 85.4% of the Stock Exchange turnover in the second quarter. The volume of trading on the official and the unofficial segment

<sup>9</sup> In September 2003, compared to the same month of the preceding year, the value of the Denar relative to the US Dollar appreciated by 14.1%.



of the market dropped by 5.3% and 23.7%, respectively, on quarterly comparison base. The turnover on the official market making up 87.6% of the total Stock Exchange turnover realized by conventional trading equaled Denar 465.6 million, while shares in the amount of Denar 44.7 million or 8.4% of the Stock Exchange turnover were traded on the unofficial market. The unofficial market registered a quarterly fall of 70.7% in the trade in convertible certificates issued by the Government for indemnification of the savers of the collapsed savings houses constituting 4.0% of the Stock Exchange turnover. In the third quarter of 2003, the trade in shares, parts and claims in Government ownership reached Denar 804.3 million, which is an increase of 3.4 times compared to the preceding quarter. The share of the block transactions\* in the total turnover on the Stock Exchange equaled 25.7% and compared to the second quarter it was by 79.3% lower. The total Stock Exchange turnover realized in conventional manner of trading and block transactions in the third quarter of 2003 made up Denar 1,797.7 million or 58.1% of the turnover registered in the second quarter.

#### Stock Exchange Turnover and Stock Exchange Index (MBI)



In the January – September 2003 period, compared to the same period of the preceding year, the Stock Exchange turnover (excluding block transactions and Government segment) was by 13.3% higher and amounted to Denar 1,559.6 million. The increase was primarily due to the 2.1 times higher Stock Exchange turnover on the official market, thus reaching Denar 1,210.0 million. On cumulative basis, the turnover with shares increased by 11 times (the total turnover with shares listed on the official market equals Denar 340.6 million, and at the end of September 2003, 100 companies with total market capitalization of Denar 17,035.4 million were listed on the official market. The possibility to purchase state land, to pay concessions and to purchase government shares and parts with the Government bonds issued for indemnification of the old foreign exchange savings on the one hand, and the second issue of denationalization bonds (listed on the Stock Exchange since March 27, 2003) on the other, resulted in an increase in the total turnover with Government bonds on the official market. Thus in the first nine months of 2003 the turnover on this market equals Denar 869.4 million and goes up by 1.6 times compared to the same period of the previous year. The unofficial market registered a turnover in the amount of Denar 204.7 million which constitutes only 38.2% of the turnover registered on this Stock Exchange market in the same period of the previous year, given the decrease in the turnover with shares and convertible certificates of 61.8% and 43.5%, respectively. In the first nine months of 2003 compared to the same period of 2002, the turnover with shares, parts and claims in Government ownership registers slight increase of 1.2% and equals Denar 1,087.7 million. In the January – September 2003 period, compared to the same period of the previous year, the total Stock Exchange turnover (with conventional trading and block transactions) is by 1.6 times higher and equals Denar 5,564.2 million.



In the third quarter of 2003, the Macedonian Stock Exchange Index (MBI) (which includes the five most liquid common shares) remained over the initial value and at the end of September 2003 equaled 1,034.9 points.

\* Stock Exchange transactions in which at least 10% of the value of the company (basic capital) were traded, or turnover in the amount over Denar 5,000,000 was realized.

*Source: Macedonian Stock Exchange.*