

IV. Monetary Developments in the Republic of Macedonia

4.1. Money supply creation and withdrawal

With the monetary strategy of targeting Denar exchange rate against the Deutsche mark being implemented, money supply is endogenous variable determined by the condition on the foreign exchange market and the need to keep the exchange rate at the targeted level.

Monetary aggregate by the narrowest definition - M1, which includes currency in circulation and demand deposits, amounted to Denar 15,178 million as of December 31, 1998, increasing relative to the end of the previous year by Denar 1,193 million or by 8.5%. Realized increase is consistent with the projection, i.e. it is below the projected increase only by 0.8 percentage points. The average annual growth rate of the money supply M1 equaled 14.9% in 1998.

Table 5

Money Supply M1 Creation and Withdrawal¹

(in million Denar)

	As of December 31, 1997	Quarterly changes					Total	As of December 31, 1998
		I	II	III	IV			
M1	13985	-1190	-340	1924	799	1193	15178	
Net Foreign Assets /2	13244	-1519	659	545	1176	861	14105	
Net Domestic Assets	13908	48	-1103	3280	971	3196	17104	
Domestic credits	54275	-1724	-3374	-16834	4768	-17164	37111	
o/w:								
Credits to social and private sector	24909	-146	29	129	5625	5637	30546	
- in denar	19703	-511	-595	-333	6238	4799	24502	
- in foreign currency	5206	365	624	462	-613	838	6044	
NBRM claims on								
Government, net	2792	378	-1845	-16	593	-890	1902	
Other items, net	-40367	1772	2271	20114	-3797	20360	-20007	
Non-monetary deposits /3 (non-Government sector)	11792	-319	-140	1948	1002	2491	14283	
Government deposits /3	1374	39	36	-47	346	374	1748	
-demand deposits	272	41	79	57	194	371	643	
-non-monetary deposits	1102	-2	-43	-104	152	3	1105	

1/ (+) Creation of money supply M1; (-) withdrawal of money supply M1.

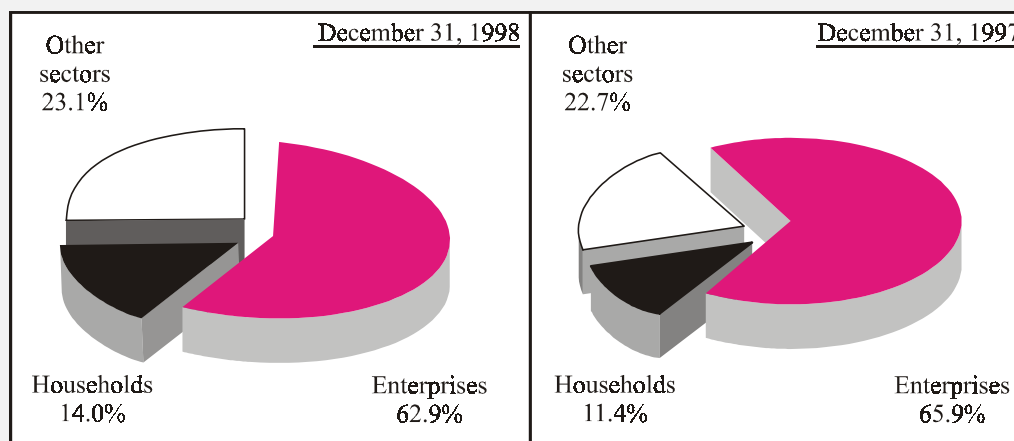
2/ Stocks are valued at a constant rate; flows are valued at a current rate.

3/ Positive change reflects withdrawal of money supply, negative change reflects creation of money supply.

With respect to dynamics, with the exception of December, money supply M1 had high annual growth rates in the course of 1998. Realized growth rates of 15.6% at the end of the first quarter, 11.4% at the end of the second quarter and 16.3% at the end of the third quarter show that the money supply in the first three quarters in 1998 was kept at a high level, which allowed for normal execution of the economic transactions without causing inflationary effects at the same time. In the fourth quarter of 1998 money growth (8.5%) slowed down to the projected level, by which quantitative criteria stipulated in the ESAF arrangement with the IMF were realized.

In 1998 no major changes took place in the structure of the money supply M1. Thus, the average share of the currency in circulation equaled 48.5% in 1998 and compared to 1997 it was lower by 0.8 percentage points. Average share of demand deposits in the money supply M1 equaled 51.5% in 1998, which exceeds the average share from the previous year by 0.8 percentage points.

Chart 8

Demand Deposits by Sectors

The most remarkable change in the structure of the demand deposits, with regard to different sectors, is registered with the households' demand deposits, which realized an annual increase of Denar 345 million or significant 44.0%. Such an increase is due to the financial innovation for non-cash payments (debit cards etc.), which increased the households' demand for transaction deposits. The share of the households' demand deposits in the total demand deposits reached 14.0% at the end of 1998, which is by 2.6 percentage points higher relative to the end of 1997. On December level, the level of demand deposits of the enterprises is higher by Denar 538 million, or 11.9%. As of December 31, 1998, their share in the total demand deposits equaled 62.9%, which is by 3.0 percentage points lower compared to the end of the previous year.

Table 6

Monetary Aggregates

(in million Denar)

	As of					Quarterly changes				
	Dec. 31, '97	Mar. 31, '98	Jun. 30, '98	Sep. 30, '98	Dec. 31, '98	I	II	III	IV	Total
Currency in circulation	7130	6026	6220	6635	7137	-1104	194	415	502	7
Demand deposits	6855	6769	6235	7744	8041	-86	-534	1509	297	1186
Money supply M1	13985	12795	12455	14379	15178	-1190	-340	1924	799	1193
Quasi deposits (denar)	3887	3878	3883	4719	4683	-9	5	836	-36	796
Quasi deposits (foreign currency)*	4138	3822	3623	4146	5514	-316	-199	523	1368	1376
Money supply M2	22010	20495	19961	23244	25375	-1515	-534	3283	2131	3365
Non-monetary deposits (denar)	2893	2888	2922	3233	2976	-5	34	311	-257	83
Non-monetary deposits (foreign currency)*	874	885	905	1183	1110	11	20	278	-73	236
Money supply M3	25778	24268	23788	27660	29461	-1510	-480	3872	1801	3683

*/ Stocks are valued at a constant rate; flows are valued at a current rate.

More broadly defined monetary aggregates had faster growth than the monetary aggregate by the narrowest definition - M1, which is an indicator of the increase in the saving and restoring of the confidence in the banking system. Thus, money supply M2 increased by Denar 3,365 million or by 15.3% in 1998. At the same time, its Denar component realized an annual growth of Denar 1,989 million or 11.1%, exceeding the projected growth rate by 1.9 percentage points. At the end of 1998 relative to the end of 1997 the monetary aggregate by the broadest definition - M3 was higher by Denar 3,683 or by 14.3%.

4.1.1. Domestic credits

In 1998 large accounting changes took place in the recording of the banks' Denar credits, which have to be taken into account in the analysis of the effects from the changes in the domestic credits on the money supply. Namely, since June 1998 on a monthly basis, the banks started to re-record from on-balance into off-balance records their overdue claims based on principal and interest which were classified in the riskiest category for two quarters in a row. Because of this, the accounting balance of the banks' credits was significantly lower and did not represent their actual level. On the other hand, in the last month of the year accounting re-recordings (consolidation of accounts) took place with one bank, where claims recorded on the accounts of other assets and foreign currency credits were transferred on accounts of Denar credits.

Table 7

Deposit Money Banks' Domestic Credits^{1/} (in million Denar)

	As of					Quarterly changes				
	Dec. 31, '97	Mar. 31, '98	Jun. 30, '98	Sep. 30, '98	Dec. 31, '98	I	II	III	IV	Total
Domestic credits	51483	49381	47852	31034	35209 ^{/3}	-2102	-1529	-16818	4175	-16274
1. In denar	46277	43810	41657	24377	29165 ^{/3}	-2467	-2153	-17280	4788	-17112
a) Credits to Government	1781	1652	1510	1342	1284	-129	-142	-168	-58	-497
- credits	1768	1640	1496	1325	1265	-128	-144	-171	-60	-503
- accrued interest	13	12	14	17	19	-1	2	3	2	6
b) Credits to private and social sector	44496	42158	40147	23035	27881 ^{/3}	-2338	-2011	-17112	4846	-16615
- credits	19703	19192	18597	18264	24502 ^{/3}	-511	-595	-333	6238	4799
- accrued interest	24793	22966	21550	4771	3379 ^{/3}	-1827	-1416	-16779	-1392	-21414
2. In foreign currency /2	5206	5571	6195	6657	6044	365	624	462	-613	838
- Government	0	0	0	0	0	0	0	0	0	0
- Social and private sector	5206	5571	6195	6657	6044	365	624	462	-613	838

1/ Accounting balances from the deposit money banks' balance sheet are presented in the table.

2/ Stocks are valued at a constant rate; flows are valued at a current rate.

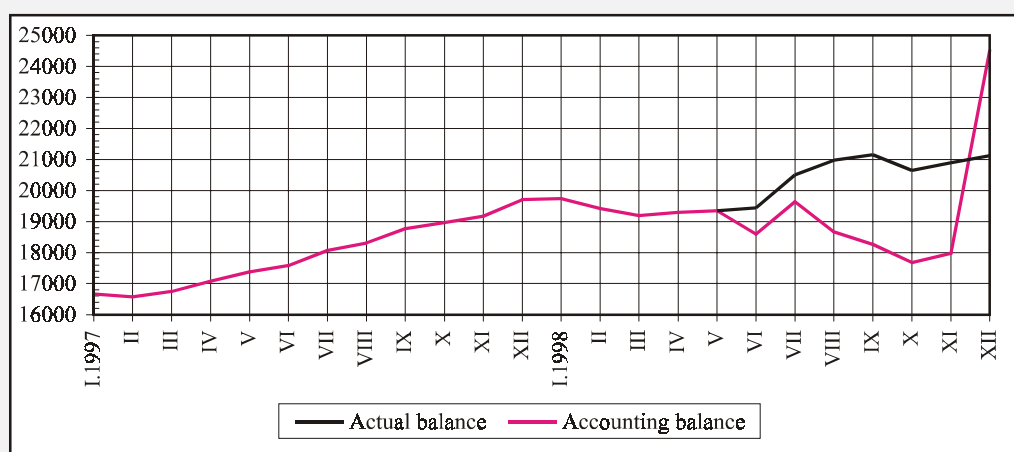
3/ Presented balances reflect both the decline caused by the re-recording from on-balance into off-balance records of the banks' overdue claims based on principal and interest in the amount of Denar 2,886 million which took place in the period June - December 1998, and the increase in the placements caused by the accounting re-recording (consolidation of accounts) in the amount of Denar 6,270 million, which took place in December 1998.

In determining the actual level of the banks' credits, the accounting changes are taken into account. As of December 31, 1998 total banks' foreign currency and Denar

credits to the non-Government sector amounted to Denar 27,162 million, which is an increase of Denar 2,253 million or 9.0% relative to the end of 1997. In the first quarter of 1998 total banks' credits decreased by Denar 146 million, in the second and the third quarter they increased by Denar 866 million and Denar 2,185 million respectively, and in the last quarter they decreased by Denar 652 million.

According to the actual balance, banks' Denar credits to the non-Government sector equaled Denar 21,118 million as of December 31, 1998 and were higher by Denar 1,415 million or by 7.2% relative to the level at the end of the previous year. Hence, they were a factor for creation of money supply. The average annual growth rate of the banks' Denar credits equaled 12.6% in 1998.

Chart 9
Banks' Denar Placements
(in million Denar)



Regarding the term structure, in 1998 short term placements had a dominant share in the banks' Denar placement to the non-Government sector, and on average it equaled 77.6%. Such a term structure is unfavorable, because it reflects lack of long term credits, which are a precondition for acceleration of the investment activity and economic growth in a long term. Unfavorable term structure of the Denar placements corresponds to the term structure of the banks' Denar deposits, where short term deposits had an average annual share of 79.7%. This shows that only 29% of the scarce deposit base of the Macedonian banks is long term and could be transformed into credit support to the investments in the economy.

Analyzed by sectors, Denar credits to the enterprises increased by Denar 1,736 million or 10.2% in 1998, representing a satisfactory credit support to the economy, especially having in mind the low level of saving in the banks. Share of the Denar placements to the enterprises equaled 88.5% at the end of 1998 and was higher by 2.0 percentage points relative to the end of the previous year. In 1998 Denar credits to the households decreased by Denar 191 million or 7.6% relative to the previous year. Their share in the banks' total Denar placements equaled 10.9% and was lower by 1.8 percentage points relative to the previous year.

Foreign currency credits of the banks extended to the non-Government sector increased by Denar 838 million or 16.1% in 1998. Lending in foreign currency is based on banks' borrowing from abroad, primarily from international multilateral financial institutions. These sources of funds have better quality, because the credits are extended to the non-Government sector as long term credits and under favorable conditions. By quarters, in the first three quarters of the year foreign currency credits of the banks had balanced and continuous increase, while in the last quarter they decreased due to the undertaken accounting change (consolidation of accounts). Foreign currency credits to the enterprises increased by Denar 386 million or 6.0%. This sector had a dominant share of 98.1% in the total foreign currency credits.

4.1.2. Net foreign assets

In 1998 net foreign assets of the monetary system increased, which made them a flow for money supply creation. Thus, net foreign assets of the monetary system equaled Denar 14,105 million at the end of 1998 and increased by Denar 861 million or 6.5% relative to the end of the previous year. This is due to the increase in the net foreign assets of NBRM in the amount of Denar 1,835 million or 21.1%. Net purchase of foreign currency on the foreign exchange market, from the inflow of foreign capital in the course of the year, caused the increase of NBRM's net foreign assets. On the other hand, net foreign assets of the deposit money banks were lower by Denar 974 million or 21.3% at the end of 1998. Their decline is due to the long term credits in foreign currency taken from the foreign banks and borrowings in terms of multilateral credits from international financial institutions.

Table 8

Net Foreign Assets of the Monetary System^{1/}

(in million Denar)

	As of December 31, 1997	Quarterly changes					As of December 31, 1998
		I	II	III	IV	Total	
Net Foreign Assets of the monetary system	13244	-1519	659	545	1176	861	14105
Net Foreign Assets of NBRM	8683	-413	1585	24	639	1835	10518
Foreign assets	12823	-413	2256	24	639	2506	15329
Foreign liabilities	4140	0	671	0	0	671	4811
Net Foreign Assets of deposit money banks	4561	-1106	-925	521	537	-973	3588
Foreign assets	13089	-1529	-411	266	3770	2096	15185
Foreign liabilities	8529	-423	514	-255	3233	3069	11598

1/ Stocks are valued at a constant rate; flows are valued at a current rate.

By quarters, at the end of the first quarter in 1998 net foreign assets of the monetary system decreased primarily as a result of the decreased net foreign assets of the deposit money banks. Increase in the net foreign assets of the monetary system at the end of the second quarter is due to the increase in the net foreign assets of the Central Bank. This is

a result of the high amount of purchased foreign currency by the Central Bank on the foreign exchange market in June 1998 (Denar 20.4 million).

At the end of the third quarter of 1998, net foreign assets of the monetary system increased, mainly as a result of the increased net foreign assets of the deposit money banks. Large increase in the net foreign assets of the monetary system in the last quarter of the year is due to the increase in its two components. Larger increase is registered with the net foreign assets of NBRM, which is due to the net purchase of foreign currency on the foreign exchange market, primarily as a result of the inflow of foreign currency from transfers, foreign direct investments and long term credits. Increase in the foreign assets of the banks in the last quarter of the year reflected the larger amount of funds on their accounts abroad, while at the same time the increase in the banks' foreign liabilities is due to the increase in the foreign currency deposits of non-residents and long term credits in foreign currency from foreign banks.

4.1.3. Total deposits

In 1998 total deposits of the non-Government sector (sight deposits, time deposits up to one year, time deposits over one year, and restricted deposits) increased by Denar 2,491 million or 21.1%. In real terms, total deposits of the non-Government sector were higher by Denar 3,542 million or 32.8% at the end of 1998 relative to the end of the previous year. Increased available income from the privatization of enterprises and selling of shares to foreign investors caused an increase in the deposits, i.e. increase in the domestic saving with the banks.

Table 9

Total Deposits of the Non-Government Sector

(in million Denar)

	As of					Quarterly changes				
	Dec. 31, '97	Mar. 31, '98	Jun. 30, '98	Sep. 30, '98	Dec. 31, '98	I	II	III	IV	Total
Total deposits of the non-Government sector	11792	11473	11333	13281	14283	-319	-140	1948	1002	2491
- in denar	6780	6766	6805	7952	7659	-14	39	1147	-293	879
- in foreign currency /1	5012	4707	4528	5329	6624	-305	-179	801	1295	1612
Short-term deposits /2	8025	7700	7506	8865	10197	-325	-194	1359	1332	2172
- in denar	3887	3878	3883	4719	4683	-9	5	836	-36	796
- in foreign currency /1	4138	3822	3623	4146	5514	-316	-199	523	1368	1376
Long-term deposits /3	3767	3773	3827	4416	4086	6	54	589	-330	319
- in denar	2893	2888	2922	3233	2976	-5	34	311	-257	83
- in foreign currency /1	874	885	905	1183	1110	11	20	278	-73	236

1/ Stocks are valued at a constant rate; flows are valued at a current rate.

2/ Short-term deposits include: sight deposits and time deposits up to one year.

3/ Long-term deposits include: time deposits over one year and restricted deposits.

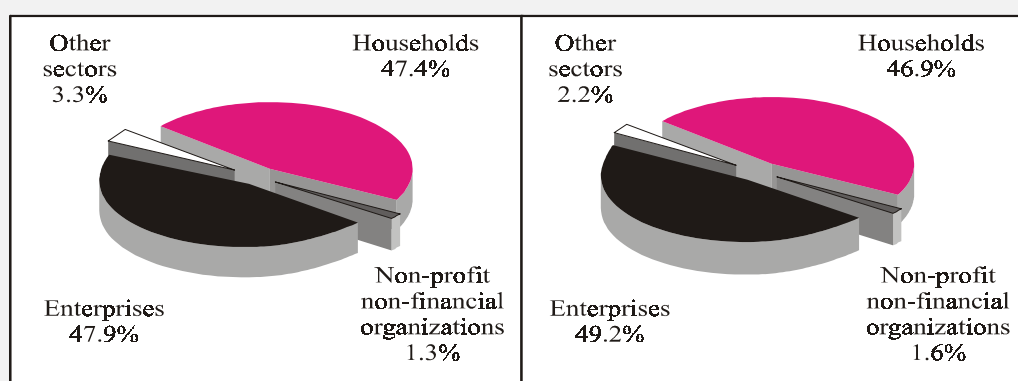
By quarters, in the first half of the year total deposits decreased by Denar 319 million (at the end of the first quarter) and by Denar 140 million (at the end of the second quarter). In the second half of the year total deposits had opposite movements, where at

the end of the third quarter they were higher by Denar 1,948 million and at the end of the last quarter were higher by Denar 1,002 million. Increase in the second half of the year exceeded the decline in the first half of the year, which made the total deposits a factor for withdrawal of money supply in 1998. In real terms, total deposits in 1998 had a continuous increase (Denar 614 million, Denar 41 million, Denar 2,073 million and Denar 814 million, by quarters, respectively).

Regarding the maturity, in 1998 both short term and long term deposits increased. Thus, at the end of 1998 sight deposits and time deposits up to one year were higher by Denar 2,172 million or 27.1% relative to the end of 1997. In 1998 long term deposits increased by Denar 319 million or 8.5% relative to the previous year. In real terms, short term deposits increased by Denar 2,950 million or 40.5%, where the long term deposits increased by Denar 593 million or 16.8%. Higher increase of the short term deposits relative to the long term deposits indicates the prevailing preference of the economic agents for using short term financial instruments, as more liquid instruments.

From the point of view of currency structure, the increase of foreign currency deposits was higher than the increase of Denar deposits. Namely, foreign currency deposits at the end of 1998 were higher by Denar 1,612 million, or by 32.2%, compared to December 31, 1997. Significant increase of these deposits (of Denar 1,295 million) was recorded in the last quarter of 1998, due to the realized payment for purchased shares of one company in December 1998. Denar deposits in 1998 increased by Denar 879 million, or by 13%. In real terms, foreign currency deposits increased by Denar 2,294 million, or by 53.1%, and Denar deposits grew by Denar 1,249 million, or by 19.2%

Chart 10

Deposits by Sectors

By sectors,¹³ as of December 31, 1998, enterprise deposits' share in total deposits was 47.9%, and households' deposits participated with 47.4%. Compared to December 31, 1997, enterprises' deposits share was lower by 1.3 percentage points, while share of households' deposits increased by 0.5 percentage points. On annual level (December

¹³ Presented changes of deposits by sectors are calculated on the basis of current exchange rate, while for monetary aggregates flows are presented in current exchange rate, and stocks are presented in constant exchange rate as of September 30, 1996.

1998/ December 1997) enterprises' deposits increased by Denar 974 million, or by 15.6%, and households' deposits grew by Denar 1,189 million, or by 19.9%. In real terms, enterprises' deposits increased by Denar 2,410 million, or by 24.2%, while households' deposits grew by Denar 2,089 million, or by 33.5%.

Within the Denar deposits, short-term Denar deposits in 1998 increased by 796 million, or by 20.5%, while long-term Denar deposits growth was slower - 83 million, or by 2.9%. In real terms, the increase of short-term Denar deposits was 1,011 million, or 27.1%. Long-term deposits in real terms increased by Denar 238 million, or by 8.6%.

Within the foreign currency deposits, short-term deposits grew in 1998 by Denar 1,376 million, while long-term deposits increased by Denar 236 million, or by 27.0%. Real growth of short-term foreign currency deposits amounted to Denar 1,939 million, or 54.4%, and long-term deposits increased in real terms by Denar 355 million, or by 47.1%.

4.2. Reserve money

At the end of 1998 reserve money amounted to Denar 7,659 million, that is lower than the projected level by Denar 39 million, or by 4.2%. The average annual rate of growth of reserve money was 13.4%. The replacement of fixed with averaging system of required reserves in 1998 resulted in decline of the money multiplier, enabling the projected level of monetary aggregates to be reached at the end of 1998. Annual growth rate of reserve money dropped from 13.3% at the end of the third quarter, to only 1.4% in December 1998. Besides the decline of money multiplier, the low December growth rate of reserve money was due to the high comparison base in December 1997.

Table 10

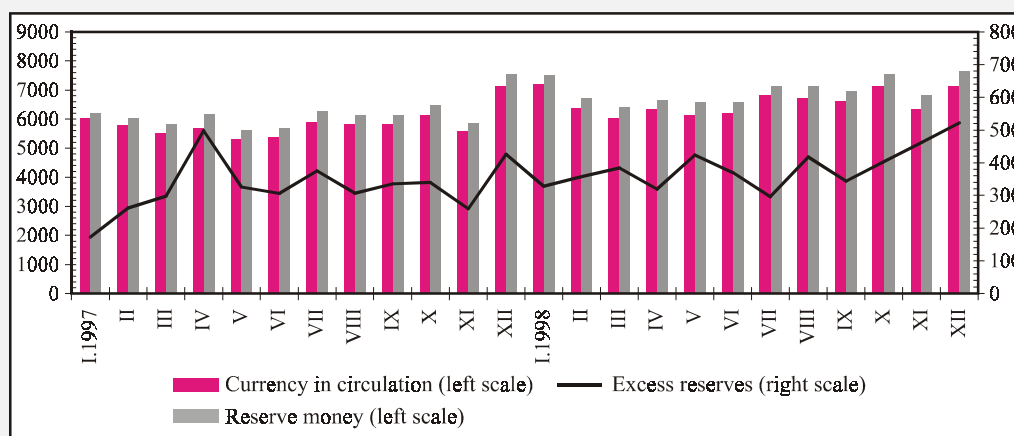
Reserve Money

	As of December 31, 1997	Quarterly changes					As of December 31, 1998
		I	II	III	IV	Total	
Reserve money (narrowest definition)	7556	-1146	180	389	680	103	7659
- currency in circulation	7130	-1104	194	415	502	7	7137
- excess reserves	426	-42	-14	-26	178	96	522

At the end of the first quarter of 1998, reserve money declined by Denar 1,146 million. This decline was stronger than the expected decline (Denar 700 - 800 million) that is normal for this period of the year. That reflects, on one hand, the normalization of the reserve money level after the unexpectedly high level reached at the end of 1997, and on the other hand the net sale of foreign currency by the Central Bank in this period. In the next three quarters, reserve money grew with the following pace: by Denar 180 million in the second quarter, by Denar 389 million in the third quarter, and by Denar 680 million in the last quarter of 1998. The increase in the last quarter of the year was expected, and it reflects the increased demand for currency in circulation.

Currency in circulation is the most significant component of reserve money. At the end of 1998, its level was almost identical to 1997. The movements of currency in circulation in 1998 were determined by seasonal factors (increased consumption during holidays, payment of pensions, vacations, etc.). In the first quarter, currency in circulation dropped by Denar 1,104 million, causing significant decline of the reserve money. The most significant increase of the currency in circulation was recorded in the last quarter of 1998, when they grew by Denar 502 million. The increase of the currency in circulation in this period was affected by one special factor - pre-election activities. Thus, in the period before the elections, fiscal policy was relaxed (payment of higher pensions, allowances for vacation, etc.), which together with the payments for some agricultural products in October and November 1998, resulted in a significant increase of the currency in circulation.

Chart 11
Reserve Money



Within the framework of the policy of targeting the Denar exchange rate against the Deutsche mark, the reserve money issuance is predetermined by the movements on the foreign exchange market. Thus, the decline of reserve money in the first quarter of 1998 coincides with the withdrawal of reserve money on the basis of net sale of foreign exchange on the market in the amount of USD 6.8 million. In the remaining three quarters, the NBRM purchased on net basis from the market USD 42.2 million, that resulted in reserve money growth by 19.5%.

4.2.1. Liquidity of the banks

The system of average reserve requirements enables the banks to be flexible with respect to the amount of deposited reserves, meaning to deposit less reserves in the periods of expected higher outflows from their accounts, and vice versa. In this way, banks' excess reserves lost the classical function of primary liquidity funds, as the required reserves deposited in excess of the average amount, played the same role. As a result of this, banks tend to keep their liquid funds on the reserve requirement accounts, instead on the excess

reserves accounts, in order to use the advantages of the average system of reserve requirements.

At the end of 1998, banks excess reserves (giro accounts and cash in vaults) were higher compared to end of 1997 by Denar 96 million, or by 22.5%. However, in the first three quarters of 1998 the liquidity of banks deteriorated, and only in the last quarter an improvement was realized. Banks' liquidity in 1998 was affected by the situation on the foreign exchange market, and by the Central Bank interventions on the market for affecting the global liquidity of the banking system. Thus, the decline of liquidity of banks in the first quarter by Denar 42 million, or by 9.8% coincides with the reserve money reduction, due to realized net sale of foreign exchange on the market. As a result of net purchase of foreign exchange on the market and increased supply of funds on the credit auctions, the decline of banks' liquidity in the second quarter of 1998 was slower - only Denar 14 million, or 3.6%. The reverse situation on the credit auction market in the third quarter, due to the need for sterilization of the monetary effects of foreign exchange transactions, resulted in worsening of the liquidity of banks by Denar 26 million, or by 7.0%.

In the last quarter of 1998, the level of banks' liquidity increased by Denar 178 million, or by 51.7%. This reflects mainly the December movements, when there was a significant inflow of capital and foreign exchange in net amount of USD 15.1 million purchased by the Central Bank. Simultaneously, the amount of credit sold on auction was increased significantly, in order banks' liquidity needs in respect to Easter and New Year holidays to be fulfilled.

Beside the average system of reserve requirements, the liquidity management of banks was affected by the money market conditions. The money market is a place where banks can sell their excess funds, and purchase liquid funds to cover their temporary shortages. In addition to these factors, banks' liquidity management was influenced by the on-going reforms of the payment system. In 1998, large payments (in excess of Denar 5 million) were transferred with the banks, thus enabling better cash-flow management by banks.

4.2.2. Net foreign assets of the NBRM

Net foreign assets of the NBRM in 1998 increased by Denar 1,835 million, or by 21.1%, thus representing a flow of reserve money creation. The realized growth rate exceeded the projected rate of growth by 1.6 percentage points. Both foreign assets and foreign liabilities of the NBRM increased in 1998, but the rate of growth of foreign assets was higher. Thus, NBRM foreign assets in 1998 increased by Denar 2,506 million, or by 19.5%, while foreign liabilities grew by Denar 671 million, or by 16.2%.

The increase of NBRM net foreign assets is a result of the following factors: a/ realized net purchase of USD 35.4 million on the market; b/ net outflow of USD 9.8

million on the external account on the basis of servicing of Government debt to abroad; c/ net inflow of 9.6 million on the basis on interest on international reserves held abroad.

Table 11
Reserve Money Creation and Withdrawal¹

	As of December 31, 1997	Quarterly changes					As of December 31, 1998
		I	II	III	IV	Total	
Reserve money	7556	-1146	180	389	680	103	7659
Net foreign assets /2	8683	-413	1585	24	639	1835	10518
- Foreign assets	12823	-413	2256	24	639	2506	15329
- Foreign liabilities	4140	0	671	0	0	671	4811
Net domestic assets	-1126	-734	-1405	365	41	-1733	-2859
- Domestic credits	5512	-481	-1445	-279	1152	-1053	4459
- Other items, net	-4861	-265	-192	633	-602	-426	-5287
- Instruments	-1777	12	232	11	-509	-254	-2031

1/ (+) Creation of reserve money; (-) withdrawal of reserve money.

2/ Stocks are valued at a constant rate; flows are valued at a current rate.

By quarters, with exception to the first quarter, NBRM net foreign assets constantly grew in 1998. However, a drop of Denar 413 million, or 4.7% was realized in the first quarter, due to the net sale of USD 6.8 million on the market, and net paid credits to abroad in amount of USD 2.4 million. In the second quarter NBRM net foreign assets increased by Denar 1,585 million, or by 19.2%. This was a result of the realized net purchase of foreign exchange on the market stemming from privatization receipts (sale of one enterprise to foreign investors for USD 20 million). In the third quarter, net foreign assets remained broadly unchanged (increased by Denar 24 million, or by 0.2%), and in the last quarter, they grew by Denar 639 million, or by 6.5%.

4.2.3. NBRM credits

Central Bank domestic credits (credits to banks and net claims on the Government) in 1998 declined by 1,052 million, or by 19.1%, representing a flow of withdrawal of reserve money.

NBRM credits to banks in 1998 dropped by Denar 163 million, or by 6.0%. The decline mainly reflects decreased amount of credits sold at auction, that is the main instrument for reserve money issue. Namely, the amount of funds sold through credit auctions at the end of 1998 was lower compared to December 31, 1997, by Denar 101 million, or by 5.1%. The withdrawal of money through decline of credits sold at auction was aimed to sterilize the effects of over-projected issue of reserve money on the basis of foreign exchange transactions.

In the first three months of 1998, the amount of credits sold at auction declined by Denar 755 million, or by 37.9%. This is expected movement, in order to normalize the high liquidity level determined by seasonal factors in December each year. In the second

quarter, the amount of credits sold at auction increased by Denar 397 million, or by 32.1%. This offsets the effects from net sale of foreign exchange in April and May 1998 (in June situation on the foreign exchange market improved due to privatization receipts). At the end of the third quarter, credits sold at auction declined by Denar 340 million, or by 20.8%. The withdrawal was strongest in late August, in order to neutralize the effects from intensified issue of reserve money at the beginning of the month, with respect to the national holiday Ilinden (August 2). At the end of the year, the demand for liquid funds is always stronger, due to the increased demand for currency in circulation for Easter and new Year holidays. The NBRM reaction on this was the increased amount of funds sold at auction by Denar 597 million, or by 46.1%.

Table 12

Domestic Credits of NBRM

	As of December 31, 1997	Quarterly changes					As of December 31, 1998
		I	II	III	IV	Total	
Domestic credits	5511	-480	-1444	-280	1152	-1052	4459
I. Credits to banks	2720	-859	400	-263	559	-163	2557
- selective credits	3	0	0	0	0	0	3
- deposits sold at auction	1993	-755	397	-340	597	-101	1892
- liquidity credits	330	2	3	1	1	7	337
- other credits	394	-106	0	76	-39	-69	325
II. Government, net	2791	379	-1844	-17	593	-889	1902
- Credits to Government	5839	-5	-46	-198	-72	-321	5518
- Government deposits	-5062	282	-1304	-800	718	-1104	-6166
a) for monetary support	-3213	-225	-225	-450	-300	-1200	-4413
b) reserve account	-1440	447	-539	242	300	450	-990
c) other restricted deposits	-409	60	-20	-628	558	-30	-439
d) deposits from privatization	0	0	-520	36	160	-324	-324
- External financing	2014	102	-494	981	-53	536	2550

The NBRM used lombard credits in 1998 as an instrument for providing liquidity for banks only after all other instruments were used, that is for its function of “lender of last resort”. Lombard credits were approved on short terms, in order to bridge the gap when daily shortages of funds appeared in some banks due to unexpected outflows. On average, each month three banks used lombard credits in 1998, in average amount of Denar 52.5 million. The low use of lombard credits is due to the lack of adequate collateral by most of the banks, as well as of the development of the money market, that enabled banks’ needs for liquid funds to be satisfied on that market. Additional factor is the introduction of swap transactions. These transactions are designed in the following manner: prompt purchase of foreign exchange and term selling of these funds to a bank later, with interest rate on the same level as for lombard credits.

The position net claims of the NBRM on the Government includes: Credits to the Government, Government deposits with NBRM, and the Government external account with the Central Bank. Net claims of NBRM on the Government at the end of 1998 amounted to Denar 1,902 million. Compared to December 31, 1997, NBRM net claims

on the Government were lower by Denar 889 million, or by 31.8%, resulting in a reserve money withdrawal.

The analysis of components of net position of the Government with NBRM, shows the following: a/ Credits to Government in 1998 declined by Denar 321 million, or by 5.5%. This is due to the repayment of Government bonds issued in the process of the banking system rehabilitation; b/ Government deposits with NBRM increased by Denar 1,104 million, or by 21.8%. This mainly reflects the transfer of money on the Government account for exchange rate support, in total amount of Denar 1,200 million (or in average by Denar 100 million each month). It also includes the deposited funds from privatization receipts (sale of one enterprise at the end of 1998) in amount of Denar 324 million, the rise of other restricted Government deposits by Denar 30 million, and a drop of Government demand deposits by Denar 450 million; c/ NBRM Claims on the Government on the external account at the end of 1998 were higher by Denar 536 million, or by 26.6%. This reflects higher payments for Government liabilities to abroad compared to received funds on the Government external account in the form of credits and grants.

4.2.4. Instruments for reserve money withdrawal

Basic instruments for reserve money withdrawal used by the NBRM are: required reserves and auction of Central Bank bills. At the end of 1998, total Denar 2,031 were withdrawn through these two instruments, that is by Denar 254, or by 14.3% more than in 1997.

Table 13

Instruments for Reserve Money Withdrawal¹

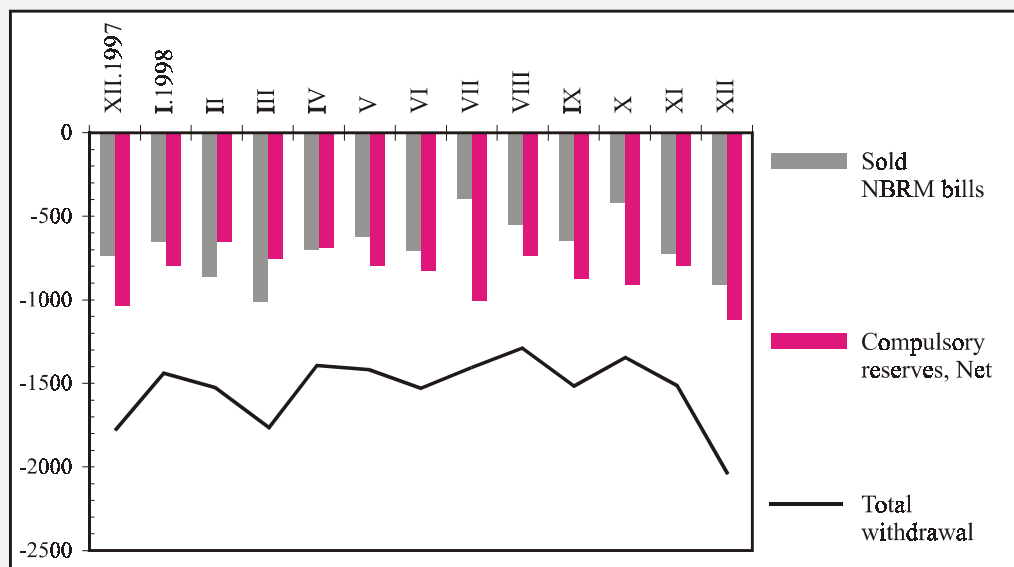
	As of December 31, 1997	Quarterly changes					As of December 31, 1998
		I	II	III	IV	Total	
Required reserves	-1039	286	-73	-49	-247	-83	-1122
Auctions for purchasing deposits	0	0	0	0	0	0	0
Auctions for selling CB bills	-738	-274	305	60	-262	-171	-909
Total amount withdrawn	-1777	12	232	11	-509	-254	-2031

1/ (+) Creation of reserve money; (-) withdrawal of reserve money.

The amount of required reserves as of December 31, 1998 was Denar 1,122 million, that is by Denar 83 million, or by 8.0% higher compared to the end of 1997. The realized growth is of an autonomous nature, stemming from the increase of deposits that comprise the base for reserve requirement calculation. With exception to the first quarter, in the remaining part of 1998 this instrument performed its function of reserve money withdrawal. Designed as a system of average reserve requirements, this instrument in 1998 proved to be efficient for smoothing the fluctuations of banks' liquidity positions. It enables the banks to adjust the amount of deposited required reserves with the planned inflows and outflows of funds. In 1998, on average, banks have deposited 5% more reserves than

required, pointing to cautious use of the advantages of the average system. In order to compensate the banks for the costs for deposited required reserves (in the form of lost revenues), the NBRM in April 1998 doubled the rate of remuneration of reserves, from 3.4% annually to 6.3%.

Chart 12

Effects from Using Instruments for Reserve Money Withdrawal

The amount of funds withdrawn through auction of Central Bank bills at the end of 1998 reached Denar 909 million, that is by Denar 171, or by 23.2% higher than in December 1997. In the first and fourth quarter of 1998 new Denar 274 million, and 262 million were withdrawn, respectively. In the second and third quarter, auctions of bills represent a flow of reserve money creation, in amount of Denar 305 million, and 60 million, respectively.

Table 14

Interest Rates and Maturity of NBRM Bills

1998	Interest rates (annual) and maturity (in days) of NBRM bills (in %)					
	7 days	14 days	30 days	40 days	60 days	90 days
January			8.24	8.57		9.44
February			8.24	8.57		9.44
March			8.24	8.57		9.44
April	5.50	6.50	8.24	8.57	8.82	9.44
May	5.50	6.50	8.24	8.57		9.44
June	5.50	6.50	8.24	8.57		9.44
July	5.50	6.50	8.24	8.57		9.44
August	5.50	6.50	8.24	8.57		9.44
September	5.50	6.50	8.24	8.57	8.82	9.44
October	5.50	6.50	8.24	8.57	8.82	9.44
November	6.50	8.00	10.00			12.00
December	6.50	8.00	10.00	10.50	11.00	12.00

During 1998, most traded instrument were Central Bank bills with maturity of 30 days. However, in the second half of 1998, banks were interested more for shorter terms,

with 14 days bills as a most frequently traded instrument. The NBRM reacted in order to attract banks and to increase their interest for bills, by increasing the interest rate. Thus, basic interest rate on 30 days bills was increased from 8.24% to 10.0% on annual level. Interest rates on other central bank bills were increased respectively.