# IV. Monetary Developments in the Republic of Macedonia

#### 4.1. Money supply creation and withdrawal

According to the monetary strategy of targeting the nominal Denar exchange rate against the Deutsche mark, the money supply in 1999 was determined by the movements on the foreign exchange market and the need for maintaining the targeted level of the exchange rate. The favorable developments on the foreign exchange market, particularly in the period after the end of the war crisis in the region, resulted in high growth rates of the money supply.

At the end of 1999, the narrowest definition of the money supply M1 reached Denar 19,694 million and relative to the level at the end of 1998 it was higher by Denar 4,516 million, or by 29.8%. The average annual growth rate of the money supply M1 equaled 24.3% in 1999.

Table 5

Creation and withdrawal of the money supply (M1)

(in Denar million)

(Iff De								
	Balance as of		Char	nges by qua	arters		Balance as of	
	31.12.1998	I	II	III	IV	Total	31.12.1999	
Money Supply M1	15,178	-209	1,088	2,582	1,055	4,516	19,694	
Net foreign assets <sup>2</sup>	14,105	-1,553	3,386	7,617	2,565	12,015	26,120	
Net domestic assets	17,104	-332	-1,219	-1,459	267	-2,743	14,361	
Domestic credits	37,111	731	-1,095	159	3,898	3,693	40,804	
out of which:								
Social and private sector credit <sup>3</sup>	30,546	121	403	1,001	-1,804	-279	30,267	
- in Denars	24,502	-111	-433	503	-627	-668	23,834	
- in foreign currency	6,044	232	836	498	-1,177	389	6,433	
NBRM claims on Government, net	1,902	-112	-1,972	-1,351	-1,064	-4,499	-2,597	
Other items, net	-20,007	-1,063	-124	-1,618	-3,631	-6,436	-26,443	
Quasi- and non-monetary deposits <sup>4</sup> (non-								
government sector)	14,283	-1,536	742	3,111	1,809	4,126	18,409	
Government deposits <sup>4</sup>	1,748	-140	337	465	-32	630	2,378	
- demand deposits	643	-134	169	235	13	283	926	
- quasi- and non-monetary deposits	1,105	-6	168	230	-45	347	1,452	

<sup>1/ (+)</sup> creation of money supply (M1); (-) withdrawal of money supply (M1)

In terms of dynamics, in the course of 1999, excluding January, the money supply M1 registered double-digit annual growth rates, which were particularly high in the June - December 1999 period. Thus, at the end of the first quarter an annual growth rate of 17.0% was realized, while in the remaining quarters the following growth rates were registered: 28.9% at the end of the second quarter, 29.6% at the end of the third quarter and 29.8% at the end of the last quarter of 1999. Exceptionally high growth rates of the money supply M1 coincided with the intensified economic activity in the period after the Kosovo crisis. It shows that money supply in 1999 provided the liquidity needed for normal execution of the transactions, while preserving the established price stability. At the same time, the fast growth of the money supply M1 enabled a remonetization of the economy and also is an indicator of the decreased money velocity.

 $<sup>2\!/</sup>$  Stocks are shown at constant exchange rate; flows are shown at current exchange rate

<sup>3/</sup> The accounting balance of the banks' credits to the private and social sector is presented.

<sup>4/</sup> Positive sign refers to money supply withdrawal, negative sign refers to money supply creation.

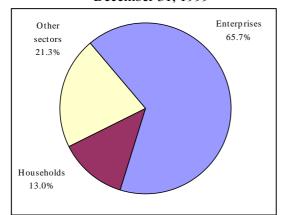
The components of the money supply M1 increased in 1999, with the demand deposits realizing a faster growth. Namely, in 1999, the demand deposits increased by Denar 3,484 million, or by 43.3%, while the increase in currency in circulation equaled Denar 1,032 million, or 14.4%. These changes in the components of the money supply M1 resulted with positive shift in the structure of this monetary aggregate. Thus, the average share of the currency in circulation in the money supply M1 equaled 42.8% in 1999 and relative to the last year's average it decreased significantly (by 5.7 percentage points). At the same time, the average share of the demand deposits in the money supply M1 increased by 5.7 percentage points, thus reaching 57.2%.

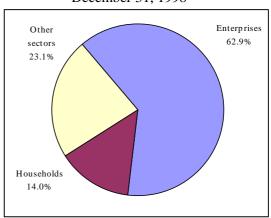
Chart 12

Demand deposits by sectors

December 31, 1999

December 31, 1998

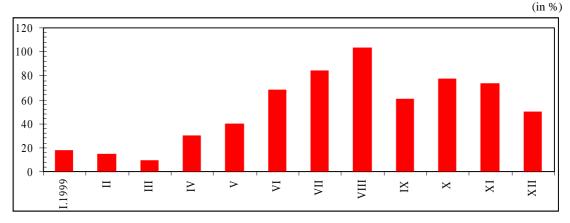




The analysis of the demand deposits by sectors shows that the significant increase in demand deposits was mainly due to the increase of the enterprises' demand deposits. Namely, in 1999, they realized considerable annual growth of Denar 2,516 million, or by 49.7%. In addition, in the June - December 1999 period, a trend of exceptionally high annual growth rates of the enterprises' demand deposits was registered, reflecting the intensified economic activity and increased number of transactions. This enabled an increase in the share of the enterprises' demand deposits in the total demand deposits by 2.8 percentage points, thus reaching 65.7% as of December 31, 1999.

Chart 13

Annual growth rates of the enterprises' demand deposits



At the end of 1999, compared to the level at the end of 1998, the households' demand deposits were higher by Denar 372 million, i.e. by 33.0%. The growth reflects the tendency of increased usage of the new financial instruments for non-cash payment (credit and debit cards

etc.) by households, which resulted in an increase of the transaction deposits of this sector. In addition, the growth in households' demand deposits was slower then the corresponding one in the enterprises' demand deposits, which reduced the share of the households' demand deposits in the total demand deposits. Namely, at the end of 1999 relative to the end of 1998 the share was lower by 1.0 percentage point and equaled 13.0%.

Table 6 Monetary aggregates

(in Denar million)

		Balance as of						Changes by quarters				
	31.12.98	31.03.99	30.06.99	30.09.99	31.12.99	I	II	III	IV	Total		
Currency in circulation	7,137	7,311	6,780	7,303	8,169	174	-531	523	866	1,032		
Demand deposits	8,041	7,658	9,277	11,336	11,525	-383	1,619	2,059	189	3,484		
Money Supply M1	15,178	14,969	16,057	18,639	19,694	-209	1,088	2,582	1,055	4,516		
Quasi-Denar deposits	4,683	4,457	4,713	5,392	6,815	-226	256	679	1,423	2,132		
Quasi-foreign currency deposits*	5,514	4,492	4,572	6,297	6,328	-1,022	80	1,725	31	814		
Money Supply M2	25,375	23,918	25,342	30,328	32,837	-1,457	1,424	4,986	2,509	7,462		
Non-monetary Denar deposits	2,976	3,010	3,145	3,362	3,816	34	135	217	454	840		
Non-monetary foreign currency deposits*	1,110	788	1,059	1,549	1,450	-322	271	490	-99	340		
Money Supply M3	29,461	27,715	29,546	35,240	38,103	-1,746	1,831	5,694	2,863	8,642		

<sup>\*</sup> Stocks are shown ar constant exchange rate; flows are shown at current exchange rate

In 1999, the broader monetary aggregates increased, with a faster growth registered in the period after the end of the war in FR Yugoslavia. Thus, on December basis, the money supply M2 increased by Denar 7,462 million, or by 29.4% in 1999. In addition, its Denar component realized a fast annual growth of Denar 6,648 million, or by 33.5%. The monetary aggregate M3, defined according to the broadest definition, was higher by Denar 8,642 million, or by 29.3% at the end of 1999 relative to the end of 1998.

### 4.1.1. Total deposits

Despite the severe external impact caused by the war in the neighborhood, the deposits of the non-government sector realized a fast growth in 1999. The increase of the deposits indicates strengthening of the economic agents' confidence in the financial sector and at the same time is an important pre-condition for intensifying the banks' lending to the economy. Thus, the total deposits of the non-government sector (sight, time and restricted deposits) increased by Denar 4,126 million, or by 28.9% in 1999. In real terms, the total deposits of the non-government sector were higher by Denar 3,823 million, or by 26.6% at the end of 1999 relative to the end of the previous year.

Table 7 Total deposits

(in Denar million)

(in Benta mine												
		Balance as of						Changes by quarters				
	31.12.98	31.03.99	30.06.99	30.09.99	31.12.99	I	II	III	IV	Total		
Total deposits of the non-												
government sector	14283	12747	13489	16600	18409	-1536	742	3111	1809	4126		
- Denar	7659	7467	7858	8754	10631	-192	391	896	1877	2972		
- foreign currency <sup>1</sup>	6624	5280	5631	7846	7778	-1344	351	2215	-68	1154		
I. Short-term deposits <sup>/2</sup>	10197	8949	9285	11689	13143	-1248	336	2404	1454	2946		
- Denar	4683	4457	4713	5392	6815	-226	256	679	1423	2132		
- foreign currency <sup>1</sup>	5514	4492	4572	6297	6328	-1022	80	1725	31	814		
II.Long-term deposits <sup>/3</sup>	4086	3798	4204	4911	5266	-288	406	707	355	1180		
- Denar	2976	3010	3145	3362	3816	34	135	217	454	840		
- foreign currency <sup>1</sup>	1110	788	1059	1549	1450	-322	271	490	-99	340		

<sup>1/</sup> Stocks are shown at constant exchange rate; flows are shown at current exchange rate.

<sup>2/</sup> Short-term deposits include: sight deposits and time deposits with up to one-year maturity.

<sup>3/</sup> Long-term deposits include: time deposits with more than one-year maturity and restricted deposits.

Analyzing in terms of dynamics, total deposits decreased only in the first quarter, while in the remaining three quarters of 1999 they registered continuous increase. The decline in the first quarter in the amount of Denar 1,536 million, was due to the significant deposit withdrawal, caused by the uncertainty and psychological factors immediately before the beginning of the war operations in FR Yugoslavia. The end of the conflict led to a gradual return of the deposits with the banks, resulting in an increase in the total deposits in the second quarter by Denar 742 million. In the third quarter of 1999, the total deposits realized a fast growth of Denar 3,111 million, while the increase in the last quarter amounted to Denar 1,809 million. In real terms, the total deposits in the first quarter of 1999 decreased by Denar 1,540 million, while the increase in the remaining three quarters equaled Denar 826 million, Denar 3,173 million and Denar 1,364 million, respectively.

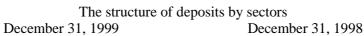
From the maturity point of view, in 1999, the short-term and long-term deposits realized an identical nominal growth rate. Thus, at the end of 1999, the sight deposits and the time deposits with up to one year maturity were higher by Denar 2,946 million, or by 28.9% compared to the level at the end of 1998. At the same time, the time deposits over one year maturity and the restricted deposits increased by Denar 1,180 million, i.e. by 28.9% in 1999 relative to the previous year. In addition, in 1999, the short-term deposits realized a real increase of Denar 2,756 million, or by 26.9% and the long-term deposits of Denar 1,066 million, i.e. by 25.9%.

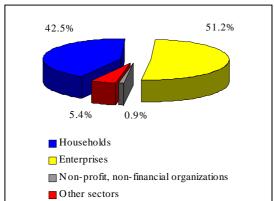
The analysis from the currency of denomination point of view shows a faster growth of the Denar deposits compared to the foreign currency deposits. Namely, at the end of 1999, the Denar deposits were higher by Denar 2,972 million, or by 38.8% compared to the level at the end of the previous year. As of December 31, 1999, the deposits denominated in foreign currency were higher by Denar 1,154 million, or by 17.4% relative to the end of the previous year. In addition, the biggest portion of the decline in the total deposits in the first quarter of the year (Denar 1,344 million) refers to foreign currency deposits, which shows that economic agents prefer to hold foreign currency while facing crisis. In real terms, in 1999, the Denar deposits increased by Denar 2,656 million, or by 34.3% and the foreign currency deposits by Denar 1,167 million, or by 17.6%.

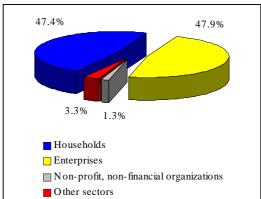
In 1999, the total Denar deposits increase was mainly due to the increase of the short-term Denar deposits by Denar 2,132 million, or by 45.5%. Most of this increase was realized in the last quarter of the year. The long-term Denar deposits were higher by Denar 840 million, or by 28.2%, at the end of 1999 relative to the level of the previous year. In real terms, the short-term Denar deposits increased by Denar 1,931 million, or by 40.8% in 1999 and the long-term Denar deposits increased by Denar 825 million, i.e. by 15.0%.

Regarding the total foreign currency deposits, at the end of 1999 the short-term foreign currency deposits were higher by Denar 814 million, or by 14.8% and the long-term foreign currency deposits by Denar 340 million, i.e. by 30.6%. The real growth of the short-term foreign currency deposits equaled Denar 724 million, or 24.1% in 1999, while the long-term foreign currency deposits increased by Denar 342 million, i.e. by 30.9%.

Chart 14







The analysis of the total deposits'<sup>11</sup> structure shows that as of December 31, 1999, the enterprises' deposits had the largest share (51.2%), followed by the households' deposits (42.5%). In comparison to December 1998, the share of the enterprises' deposits was higher by 3.3 percentage points, while the share of the households' deposits decreased by 4.9 percentage points. On annual basis (December 1999 / December 1998), the total enterprises' deposits realized fast growth of Denar 2,772 million, or by 38.3%. In 1999, the households' deposits increased by Denar 1,147 million, or by 16.0%. In real terms, in 1999 the enterprises' deposits increased by Denar 2,431 million, or by 35.4% and the households' deposits by Denar 922 million, or by 13.6%.

## 4.1.2. Banks' placements<sup>12</sup>

In 1999, the total banks' credits increased, thus supporting the money supply creation. As of December 31, 1999, total banks' credits to the non-government sector reached Denar 35,107 million and were higher by Denar 3,027 million, or by 9.4%, relative to the end of the previous year. In terms of dynamics, during 1999, total banks' credits were registering a continuous growth, with the average annual rate of growth equaling 8.9%.

From the currency of denomination viewpoint, the banks' Denar credits extended to the non-government sector amounted to Denar 26,859 million as of December 31, 1999, which compared to the level at the end of 1998 represents an increase of Denar 1,597 million, or by 6.3%. The average annual rate of growth of the banks' Denar credits equaled 5.0% in 1999.

<sup>&</sup>lt;sup>11</sup> In analyzing the structure of deposits by sectors they are presented at current exchange rate, while in analyzing the monetary aggregates the flows are presented at current exchange rate and the stocks at constant exchange rate.

<sup>&</sup>lt;sup>12</sup> Banks' credits are presented in accordance with their actual balance. The actual balance of Denar credits differs from the accounting balance because it includes the claim of one bank in 1997 in the amount of Denar 4,144 million, the claims of banks on the basis of principal and overdue interest in the period June 1998 - December 1999 in the amount of Denar 3,465 million, as well as the net effect of the swap transaction with the State and rerecordings of one bank in amount of Denar 1,686 million in December 1999, while it excludes credits increase due to the consolidation of accounts in December 1998 in amount of Denar 6,270 million. Foreign currency credits include the accounting re-recordings in December 1998 in the amount of Denar 774 million and the net effect of the swap transaction with the State and re-recordings of one bank in December 1999 in amount of Denar 1,041 million.

Table 8

Deposit money banks' domestic credits

		I	Balance as of	f		Changes by quarters						
	31.12.98	31.03.99	30.06.99	30.09.99	31.12.99	I	II	III	IV	Total		
Domestic credits <sup>1</sup>	35,209	36,052	36,929	38,439	43,402	843	877	1,510	4,963	8,193		
Domestic credits <sup>2</sup>	36,743	37,550	38,686	40,339	48,242	807	1,136	1,653	7,903	11,499		
1. Credits to the Government	1,284	1,203	1,047	947	8,524	-81	-156	-100	7,577	7,240		
- Denar credits	1,265	1,180	1,025	924	1,260	-85	-155	-101	336	-5		
- Foreign currency credits <sup>3</sup>	0	0	0	0	7,239	0	0	0	7,239	7,239		
- overdue interest	19	23	22	23	25	4	-1	1	2	6		
2. Social and private sector credit <sup>1</sup>	33,925	34,849	35,882	37,492	34,878	924	1,033	1,610	-2,614	953		
- Denar credits	24,502	24,391	23,958	24,461	23,834	-111	-433	503	-627	-668		
- Foreign currency credits <sup>3</sup>	6,044	6,276	7,112	7,610	6,433	232	836	498	-1,177	389		
- overdue interest	3,379	4,182	4,812	5,421	4,611	803	630	609	-810	1,232		
2a. Social and private sector												
credit <sup>2</sup>	32,080	32,165	32,827	33,971	35,107	85	662	1,144	1,136	3,027		
- Denar credits	25,262	25,115	24,942	25,587	26,859	-147	-173	645	1,272	1,597		
- Foreign currency credits <sup>3</sup>	6,818	7,050	7,885	8,384	8,248	232	835	499	-136	1,430		

<sup>1/</sup> Accounting balance

In terms of dynamics, the increase of the banks' credits corresponded with the movements of the banks' deposits and the developments on the foreign exchange market, which caused an appropriate designing of the monetary policy. At the end of the first quarter of 1999, the banks' Denar credits decreased by Denar 147 million, which represents a usual seasonal decline in this period of the year. The unfavorable movements on the foreign exchange market and the realized net-sale of foreign exchange in the April - May 1999 period, resulted with increased tightening of the monetary policy which had an unfavorable impact upon the banks' credit activity. At the same time, the uncertainty related to the beginning and duration of the war in FR Yugoslavia caused an outflow of deposits from the banks and considerable worsening of their liquidity. As a consequence of this, the banks' Denar credits in the second quarter of the year decreased by Denar 173 million. In the period after the end of the war conflict in FR Yugoslavia, the monetary policy was relaxed to a certain extent, which corresponds to increased liquidity of the banks. Namely, the high amount of purchased foreign exchange on the foreign exchange market in the second half of the year enabled implementation of a more relaxed monetary policy. At the same time, the deposits in the banks increased significantly in this period, which acted toward an increase in the banks' credits. Thus, the banks' Denar credits were higher by Denar 645 million at the end of the third quarter and by Denar 1,272 million at the end of the last quarter of 1999.

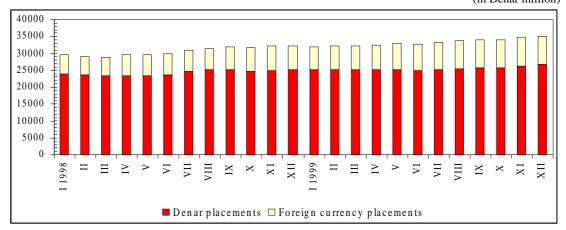
<sup>2/</sup> Actual balance

<sup>3/</sup> Stocks are shown at constant exchange rate; flows are shown at current exchange rate

Chart 15

#### Banks' credits

(in Denar million)



In 1999, no significant changes in the maturity structure of the banks' Denar credits took place. Namely, as of December 31, 1999 the share of the short-term credits in the total banks' Denar credits equaled 74.6%, and was lower by only 0.2 percentage points relative to the end of 1998. As a result of the insufficient amount of long term credits, the maturity structure of the banks' Denar credits remained unfavorable for stimulating the long term economic development.

The analysis of the banks' Denar credits by sectors reflects the dominant share of the credits extended to the enterprises. Namely, the share of credits extended to enterprises in the total banks' Denar credits equaled 88.9% at the end of 1999, and relative to the end of 1998 it was lower by 1.1 percentage points. In addition, in 1999, banks' Denar credits to the enterprises increased by Denar 629 million, or by 2.9%. In 1999, banks' Denar credits to the households increased by Denar 317 million, i.e. by 13.7% relative to 1998. In addition, the share of the credits to households equaled 10.3% as of December 31, 1999, and it was higher by 0.8 percentage points relative to the end of the previous year.

The banks' foreign currency credits to the non-government sector reached Denar 8,248 million at the end 1999 and relative to the previous year they increased by Denar 1,430 million, or by 21.0%. In 1999, the banks' foreign currency credits realized a high average annual growth rate of 24.2%. A bigger portion of these credits is based on credit lines from abroad aimed at financial support of: the private sector, small and medium size enterprises, trade and agriculture development, as well as tobacco purchase. Therefore, fast growth of the credits based on credit lines from abroad is of great importance for intensifying the economic activity. In 1999, the average interest rate on the credits extended on a basis of foreign credit lines was lower then the Denar credits' interest rate by around 10 percentage points, which makes these credits particularly attractive for the investors.

In terms of dynamics, in the first three quarters of 1999, the banks' foreign currency credits to the non-government sector realized a continuous increase: by Denar 232 million in the first quarter, by Denar 835 million in the second quarter and by Denar 499 million in the third quarter. In the last quarter of 1999 they decreased by Denar 136 million.

In 1999, the maturity structure of the banks' foreign currency credits was more favorable in comparison to the Denar credits. This was due to the more favorable structure of the credits on which these credits are based (foreign credit lines). Thus, the share of the long-term foreign currency credits in the total foreign currency credits equaled 44.0% at the end of 1999. Nevertheless, compared to December 1998, the share of the long term foreign currency credits in the total foreign currency credits decreased by 18.7 percentage points.

Analyzing by sectors, the biggest portion of the total foreign currency credits is extended to enterprises. Thus, as of December 31, 1999 the share of the enterprises' foreign currency credits in the total foreign currency credits equaled 99.2%, which relative to the end of the previous year represents a 1.1 percentage points increase. In addition, the foreign currency credits to enterprises increased by Denar 1,237 million, or by 18.1% in 1999.

In December 1999, an increase of the banks' foreign currency credits to the Government in amount of Denar 7,239 million took place. It is a swap transaction between "Stopanska banka" - Skopje and the Government, in which the Government undertook the bad loans of the bank by issuing a Government bond. This transaction is a part of the preparatory activities for completion of the sale of "Stopanska banka" - Skopje to a foreign strategic investor.

#### 4.1.3. Net foreign assets

In 1999, net foreign assets of the monetary system represented a flow of money supply creation. Namely, as of December 31, 1999, they reached Denar 26,120 million and relative to the end of the previous year they realized a fast increase of Denar 12,015 million, or by 85.2%. In addition, an increment in both components was registered. Namely, the net foreign assets of NBRM increased by Denar 8,181 million, or by 77.8% in 1999, mainly due to the realized net purchase of foreign exchange on the foreign exchange market in total amount of US Dollar 118 million. In 1999, the large foreign exchange inflow on the foreign exchange market resulted from large foreign exchange inflows based on grants from abroad and inflows from non-residents (in the March - June period), as well as the improvement in the current account of the balance of payment due to the intensified exports of Macedonian products on the Kosovo market (in the period after the end of the war). At the same time, the net foreign assets of the deposit money banks increased by Denar 3,834 million, or by significant 106.9% in 1999, mainly due to the increase in foreign exchange held abroad.

Table 9

Net foreign assets of the monetary system\*

(in Denar million) Balance as of Changes by quarters Balance as of 31 12 1998 31 12 1999 П Ш Total Net foreign assets of the monetary system 14105 -1553 3386 7617 2565 12015 26120 2199 3983 1987 Net foreign assets of NBRM 10518 12 8181 18699 15329 -180 2030 4761 1678 8289 23618 Foreign assets Foreign liabilities 4811 -192 -169 778 -309 108 4919 Net foreign assets of the deposit money banks 3587 -1565 1187 3634 578 3834 7421 Foreign assets 15185 -34842228 5983 736 5463 20648 -1919 1041 2348 160 1630 13228

In terms of dynamics, at the end of the first quarter of 1999, the net foreign assets of the monetary system realized a decline, which was completely due to the decreased net foreign assets of the deposit money banks. Namely, in the period before the beginning of the war in FR Yugoslavia, when banks faced serious liquidity problems, foreign exchange from the banks' accounts abroad was withdrawn, which was reflected upon the level of their net foreign assets. The normalization of the situation in June enabled opposite movements, which resulted in an increase in the net foreign assets of the deposit money banks at the end of the second quarter. Including the June purchase of foreign exchange on the foreign exchange market (US Dollar 35 million) which enabled an increase of the net foreign assets of NBRM, this resulted in an increase of the net foreign assets of the monetary system by Denar 3,386 million in the second quarter.

<sup>\*</sup> Stocks are shown are constant exchange rate; flows are shown at current exchange rate.

The positive movements in the net foreign assets of the monetary system in the second quarter, continued in the last two quarters of 1999. This was mainly a result of the favorable movements on the foreign exchange market, which enabled an increase of the net foreign assets of NBRM. In addition, the high increase of the net foreign assets of the monetary system in the third quarter was partly a result of the considerable increment of the net foreign assets of the deposit money banks, too. The increase of the banks' foreign assets in the third quarter was a result of the increased amount of foreign exchange on their accounts abroad, while the increase of the banks' foreign liabilities in the same quarter was due to the increase in the foreign currency deposits of non-residents. The increase of the net foreign assets of the monetary system in the last quarter was mainly caused by the increase of the net foreign assets of NBRM, while banks' net foreign assets realized a moderate increase.

#### 4.2. Reserve money

Reserve money includes currency in circulation and liquid assets of the deposit money banks (giro-accounts and cash in vault). At the end of 1999, the reserve money amounted to Denar 8,515 million, which is by Denar 856 million, or by 11.2% higher compared to the end of 1998.

With respect to dynamics, as a result of the external shock caused by the military actions in FR Yugoslavia, reserve money movements in the first two quarters of 1999 differed from the usual and projected one for this period of the year. Thus, instead of the typical seasonal decline by Denar 700-800 million, usually caused by the expected decline of the currency in circulation, in the first quarter of 1999 reserve money increased by Denar 45 million. It is due to the following: a/ excessive increase of currency in circulation caused by withdrawal of deposits out of banks because of the increased risk in the period prior to the beginning of the war in FR Yugoslavia, and b/ belated cash payment of the purchased tobacco. In the second quarter, as a result of the normalization of the situation in the neighborhood, reserve money decreased by Denar 440 million. In the third quarter reserve money increased by Denar 492 million, while its increase by Denar 759 million in the last quarter of 1999 was the highest, and is a typical seasonal phenomenon, which is caused by the increase in the currency in circulation.

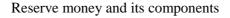
Table 10 Reserve money, according to the narrowest definition

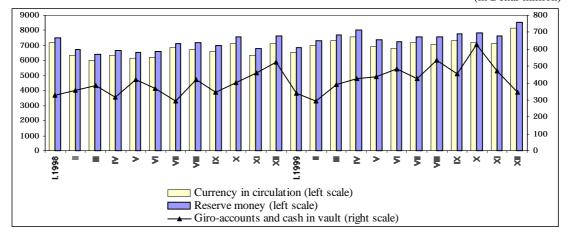
(in Denar million)

							,		
	Balance as of		Changes by quarters						
	31.12.98	I	II	III	IV	Total	31.12.99		
Reserve money									
(narrowest definition)	7,659	45	-440	492	759	856	8,515		
- currency in circulation - giro-accounts and cash in	7,137	174	-531	523	866	1,032	8,169		
vaults	522	-129	91	-31	-107	-176	346		

At the end of 1999, currency in circulation amounted to Denar 8,169 million. On December basis, they increased by Denar 1,032 million, or by 14.5%. In addition, their dominant share in the reserve money (over 90%), caused tight dynamic correlation between reserve money and currency in circulation. Thus, in the first quarter of 1999 currency in circulation grew by Denar 174 million, while in the second quarter it dropped by Denar 531 million. In the third and the fourth quarters currency in circulation increased by Denar 523, and 866 million, respectively. The increased level of the currency in circulation in the last quarter is due to the seasonal demand for currency in circulation prior to the New Year and Christmas holidays.

Chart 16



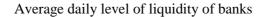


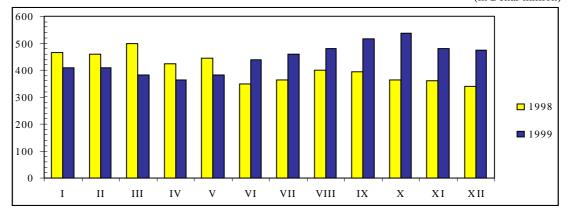
In line with the monetary strategy of the NBRM for maintaining the stability of targeted level of the Denar exchange rate against the Deutsche mark, the reserve money issuance was determined by the situation on the foreign exchange market. During 1999, NBRM transactions on the foreign exchange market resulted in net-purchase of foreign exchange in the amount of US Dollar 118 million (with unequal dynamics by quarters), which consequently resulted in reserve money issuance.

### 4.2.1. Liquidity of banks

In 1999, the liquidity of the banking sector improved. Thus, the average daily level of liquidity of banks (giro-accounts and cash in vault) equaled Denar 444 million in 1999, and was higher by Denar 39 million, or by 9.6% relative to the average level for 1998. Changes in liquidity of the banking system were affected by the events prior to and after the war in FR Yugoslavia. Thus, contrary to the projected movements, in the first half of the year there was an outflow of deposits from the banking system, causing an increase in the currency in circulation. As a result, the average level of daily liquidity of banks deteriorated, and was lower by 9.7% on average, compared to the same period of 1998. However, the favorable movements on the foreign exchange market in the second half of 1999 enabled net sale of foreign currency by the Central Bank and significant reserve money issuance. Herewith, the level of the average daily liquidity of the banking system in the second half of 1999 significantly improved, and increased by 32.6% compared to the same period of the previous year. The highest level of average daily liquidity of the banks of Denar 537 million was registered in October 1999, when an annual rate of growth of 47.2% was registered.

Chart 17





As of December 31, 1999, banks' excess reserves (giro accounts and cash in vault) equaled Denar 346 million, which is by 33.7% lower compared to the end of 1998. The registered decline was due to the high comparison base from the previous year. With respect to dynamics, at the end of the first quarter of 1999, compared to the end of 1998, banks' excess reserves dropped by Denar 129 million, or by 24,7%. It was a result of the increased withdrawal of liquidity out of banks prior to and after the beginning of the military actions in Kosovo, as well as a result of the outflows from the banks' giro accounts for additional tax payments based on the annual statement. At the end of the second quarter of the year, compared to March 31, 1999, an improvement in the liquidity of the banks was registered. Namely, banks' excess reserves increased by Denar 91 million, or by 23,1%. The daily level of liquidity of banks at the end of the third and fourth quarters of 1999 was lower than the level at the end of the previous quarter by Denar 31 million and Denar 107 million, respectively.

For the purpose of more efficient cash-flow management, in 1999, compared to 1998, the banks were much more oriented towards the money market, where the total turnover increased by Denar 7,952 million, or by 67.1%. In addition, dynamically observed, banks were mostly relying on the money market during the war in FR Yugoslavia (in the second quarter of 1999).

The reform of the payment system in the Republic of Macedonia also plays an important role in the efforts for achieving more efficient cash-flow management within the banking system. The reform has begun in 1997 and it is expected to be completed by the end of 2002. In 1999, the emphasis was put on the preparations for implementation of the RTGS system within the NBRM, which will be used for large and urgent payments, and for settlement. Thus, once the RTGS system is adopted, the settlement accounts of the commercial banks will be transferred to the NBRM. The adoption of the RTGS system is the first and very important stage of the reform, since the dynamics of the reform in the payment system will depend on its successful implementation. For that purpose, in 1999 efforts for acquiring the necessary financial support for the realization of the project were made, and technical specifications for the functional characteristics of the RTGS system were prepared. At the same time, the Steering Committee for the reforms of the payment system established special Committees for each segment of the payment system.

#### 4.2.2. Net foreign assets of the NBRM

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<sup>&</sup>lt;sup>13</sup> RTGS is an abbreviation for Real Time Gross Settlement System.

In 1999, net foreign assets of the NBRM, defined as a difference between foreign assets and foreign liabilities of the Central Bank, were representing a flow of reserve money creation. Thus, as of December 31, 1999, net foreign assets of the NBRM amounted to Denar 18,699 million, and were higher by Denar 8,181 million, or by 77.8% compared to the end of 1998. This was due to the growth of foreign assets being faster than the growth of foreign liabilities. Thus, foreign assets increased by Denar 8,289 million, or by 54.1%, while foreign liabilities growth was slower and equaled Denar 108 million, or 2.2%.

The increase of NBRM net foreign assets in 1999 is a result of the following factors: a/ realized net-purchase of US Dollar 118 million on the foreign exchange market; b/ net-inflow of US Dollar 12 million on the Government external account; c/ net-inflow of US Dollar 10 million on the basis on interest on international reserves held abroad.

Table 11 Reserve money creation and withdrawal<sup>/1</sup>

(in Denar million)

						(111	Denai mimon,
	Balance as of			Balance as of			
	31.12.98	I	II	III	IV	Total	31.12.99
Reserve money	7,659	45	-440	492	759	856	8,515
Net foreign assets <sup>/2</sup>	10,518	12	2,199	3,983	1,987	8,181	18,699
- Foreign assets	15,329	-180	2,030	4,761	1,678	8,289	23,618
- Foreign liabilities	4,811	-192	-169	778	-309	108	4,919
Net domestic assets	-2,859	33	-2,639	-3,491	-1,228	-7,325	-10,184
- Domestic credits	4,459	106	-2,829	-2,137	-1,212	-6,072	-1,613
- Other items, net	-5,287	-515	485	-412	1,000	558	-4,729
- Instruments	-2,031	442	-295	-941	-1,017	-1,811	-3,842

<sup>1/ (+)</sup> reserve money creation; (-) reserve money withdrawal.

With respect to dynamics, the net foreign assets of the NBRM in the first quarter of 1999 increased by only Denar 12 million, or by 0.1%. In the second quarter of 1999, NBRM net foreign assets grew by Denar 2,199 million, or by 20.9%, due to the realized net-purchase of US Dollar 27 million on the market, as well as the received foreign financial aid in the amount of US Dollar 10 million. In the third quarter, the highest quarterly increase of net foreign assets of Denar 3,983 million, or 31.3% was registered. The increase is a result of the significant net-purchase of foreign exchange on the market by the Central Bank (US Dollar 59 million), and of the high net-inflow of US Dollar 21 million on the basis on new borrowings (withdrawn funds from loans from the IMF and IDA). In the last quarter they grew by Denar 1,987 million, or by 11.9%, due to the net-purchase of US Dollar 19 million on the foreign exchange market, and net-inflow of donations and loans from abroad in the amount of US Dollar 6 million.

### 4.2.3. NBRM credits

Central Bank domestic credits include Denar credits to banks and net claims on the Government. At the end of 1999, NBRM domestic credits had a negative sign and equaled Denar 1,613 million. This is a result of considerably reduced credits to banks during 1999, as well as of the transformed NBRM net claims on Government into net liabilities to the Government. In addition, total NBRM domestic credits declined by Denar 6,072 million in 1999, resulting in a reserve money withdrawal.

<sup>2/</sup> Stocks are shown at constant exchange rate; flows are shown at current exchange rate.

Table 12

Domestic credits of NBRM

	Balance as of	Balance as of Changes by quarters						
	31.12.98	I	II	III	IV	Total	31.12.99	
Domestic credits	4,459	106	-2,829	-2,137	-1,212	-6,072	-1,613	
I. Credits to banks	2,557	218	-857	-786	-148	-1,573	984	
- selective credits	3	0	-3	0	0	-3	0	
- deposits sold at auction	1,892	248	-529	-967	-110	-1,358	534	
- liquidity credits	337	1	-338	0	0	-337	0	
- other credits	325	-31	13	181	-38	125	450	
II. Government, net	1,902	-112	-1,972	-1,351	-1,064	-4,499	-2,597	
- Credit to Government	5,518	0	-41	-284	12	-313	5,205	
- Government deposits <sup>/1</sup>	-6,166	-969	-1,455	-698	-396	-3,518	-9,684	
<ul> <li>a) for monetary policy support</li> </ul>	-4,413	-300	-200	-1,000	500	-1,000	-5,413	
b) giro-account	-990	-659	-910	273	-195	-1,491	-2,481	
v) other restricted deposits	-439	-10	-345	29	-701	-1,027	-1,466	
g) privatization deposits	-324	0	0	0	0	0	-324	
- External financing	2,550	858	-477	-369	-680	-668	1,882	

1/ Since liabilities are shown on the assets side, the balance as of December 31, 1998 and December 31, 1999 are shown with a minus sign. In the change by quarters, the changes with minus sign represent an increase in deposits and vica versa.

NBRM credits to banks in 1999 dropped by Denar 1,573 million, or by significant 61.5%. Within the structure of these credits, deposit auctions represent the main flow of reserve money withdrawal. Namely, during 1999, reserve money in the amount of Denar 1,358 million was withdrawn through this instrument. It is due to the NBRM intention to sterilize the effects of the Central Bank transactions on the foreign exchange market through successive reduction in the deposits sold at auctions.

With respect to dynamics, in the first quarter of 1999, the amount of deposits sold at auctions increased by Denar 248 million, or by 13.1%. This increase is not a usual phenomenon for this period of the year, and it is due to the Central Bank interventions in order to improve banks' liquidity in the period of intensified withdrawal of deposits out of banks (prior to and after the beginning of the war in FR Yugoslavia), as well as to the cash payment for purchased tobacco. In the second quarter of the year, the level of deposits sold at auctions was normalized through their gradual decline. In this manner, an amount of Denar 529 million was withdrawn, that enabled partial neutralization of the monetary effects from the net-purchase of foreign exchange on the market. The high foreign exchange inflow was even more intensified in the July - September period (net-purchase of US Dollar 59 million), when NBRM used almost the entire capacity of the existing monetary instruments in order to sterilize the monetary effects from the excessive net-purchase of foreign exchange. Thus, in the third quarter of 1999, the amount of deposits sold at auctions declined by Denar 967 million, and was brought down to Denar 644 million. This tendency continued in the last quarter of 1999, and in November the amount of deposits sold at auctions was reduced to zero. Because of the typically increased banks' demand for liquidity in the period prior to the New Year and Christmas holidays, in December 1999, NBRM was again selling liquidity to the banks through deposit auctions. Thus, at the end of the year the amount of deposits sold at auctions equaled Denar 534 million.

During 1999, NBRM was using Lombard credits and Swap transactions as "a lender of last resort" instruments, i.e. for overcoming banks' short-term liquidity problems. The average monthly amount of used Lombard credits in 1999 equaled Denar 47 million, pointing out the low use of this instrument, which corresponds with the relatively high average liquidity of the banking sector. In addition, more frequent usage of Lombard credits was registered during the period of the crisis in Kosovo. In 1999, more frequent usage of Swap transactions was registered, not only for overcoming the short-term shortage of liquidity, but also for fulfillment of the compulsory reserve and minimum liquidity obligations. The

average monthly amount of approved Swap transactions equaled Denar 149 million in 1999. Relatively higher usage of Swap transactions is due to the lack of the adequate collateral (securities) necessary for approval of Lombard credits.

The net-position of the Government includes, on net basis: credits to the Government, Government deposits with NBRM, and Government external account balance. At the end of 1999, the net-position of the Government had a negative sign and equaled Denar 2,597 million, which represents net liabilities of the Central Bank towards the Government. In 1999, the NBRM transactions with the Government, on net basis, resulted in a reserve money withdrawal.

With respect to the structure, the increase in NBRM net liabilities towards the Government is due to the reduced amount of credits extended to the Government, despite the high increase of Government deposits, and net-inflow on the Government external account. Credits to the Government dropped by Denar 313 million, or by 5.7% in 1999. The significant increase of the Government deposits with NBRM in the amount of Denar 3,518 million, or 57.0%, in 1999, is a result of the increase of Government demand deposits by Denar 1,491 million, the increase of other restricted Government deposits by Denar 1,027 million, and of the transferred money from the Budget for monetary policy support in total amount of Denar 1,000 million. At the end of 1999, NBRM claims on the Government deriving from the external account were lower by Denar 668 million, or by 26.2%. This reflects higher inflows on the Government external account compared to the payments for Government's foreign liabilities.

#### 4.2.4. Instruments for reserve money withdrawal

In 1999, reserve money was withdrawn through compulsory reserve and auctions of Central Bank bills, as instruments for monetary regulation that NBRM traditionally uses for this purpose. At the end of 1999, a total amount of Denar 3,842 million was withdrawn through these instruments, that is by Denar 1,811 million, or by 89.2% more compared to the end of 1998. The high amount of withdrawn reserve money reflects the high liquidity of the banking system.

Table 13

Instruments for reserve money withdrawal

(in Denar million)

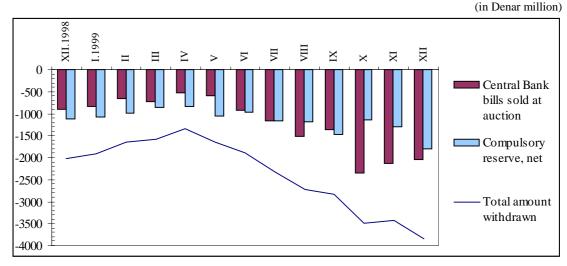
	(III Delita IIIIII oil)									
	Balance as of		Chan	Balance as of						
	31.12.98	I	II	III	IV	Total	31.12.99			
Compulsory reserve	-1,122	258	-104	-498	-329	-673	-1,795			
Central Bank bills sold at auction	-909	184	-191	-443	-688	-1,138	-2,047			
Total amount withdrawn	-2,031	442	-295	-941	-1,017	-1,811	-3,842			

 $1/\left( \text{--}\right)$  Reserve money with drawal; (+) Reserve money creation.

At the end of 1999, the total amount of money withdrawn through compulsory reserves, designed as a system of average compulsory reserve, at the end of 1999 reached Denar 1,795 million, and was by Denar 673 million, or by 60.0% higher than in 1998. Higher compulsory reserve is a result of the increased deposits that comprise the base for compulsory reserve calculation, as well as of banks' intention to maintain higher level of liquidity than necessary.

Chart 18

Effects of the instruments for reserve money withdrawal



With respect to dynamics, in the first quarter of 1999 the amount of net compulsory reserve was lower by Denar 258 million, and resulted in a reserve money creation. It is due to the reduced deposits, stemming from the intensive outflow of funds from the banks in the period before the beginning of the war in FR Yugoslavia. As a result of the normalized situation in the banking system, in the remaining quarters of the year this instrument was used for reserve money withdrawal. In addition, in 1999, as well as in 1998, the banks in the Republic of Macedonia were cautious when using the advantages of the system of average compulsory reserve. Namely, in 1999, excluding March when banks deposited 4% less than required as a result of the rapid withdrawal of deposits out of banks in the period before the beginning of the war in FR Yugoslavia, on average, each month banks deposited 4.7% more reserves than required. This percent is by 0.3 percentage points lower than in 1998 (5%), and by 9.3 percentage points lower compared to 1997 (14%), which reflects certain improvement of the cash-flow management by banks.

The total amount of Central Bank bills sold at auctions equaled Denar 2,047 million at the end of 1999, and compared to the end of 1998 it was higher by Denar 1,138 million, or by 2.3 times. With respect to dynamics, excluding the first quarter when reserve money in amount of Denar 184 million was created, in the remaining quarters of the year through this instrument, reserve money in amount of Denar 1,322 million was withdrawn, out of which Denar 688 million were withdrawn only in the last quarter. This corresponds with the changes in the liquidity of the banking system determined by the crisis in FR Yugoslavia.

Table 14

Interest rates and maturity of NBRM bills

		111101	obt rate.	and ma	carrey or	1 12111	CITIE			
			Matur	ity (in days	) and inte	rest rates (	on annual	basis)		
					of Central	Bank bills				
1999	7 days	14 days	28 days	30m days	40 days	42 days	56 days	60 days	90 days	91 days
January	6.50	8.00		10.00					12.00	
February	6.50	8.00		10.00					12.00	
March	6.50	8.00		10.00					12.00	
April	6.50	8.00		10.00					12.00	
May	6.50	8.00		10.00					12.00	
June	6.50	8.00		10.00					12.00	
July	6.50	8.00		10.00					12.00	
August	6.50	8.00		10.00					12.00	
September	6.50	8.00		10.00					12.00	
October		8.00		10.00					12.00	
November 1 - 15		8.00		10.00					12.00	
November 16 - 30		7.50	9.50							11.00
December		7.50	9.50							11.00

With respect to maturity, during 1999 banks were more interested for Central Bank bills with shorter maturity, and the most traded were bills with 30-day maturity (i.e. 28-day maturity in the last two months). The continuous declining trend of the interest rates on the money market and on deposit auctions in the second half of 1999, resulted in a situation where interest rates of the Central Bank bills, as low-risk securities, were higher than the interest rates of financial instruments with higher risk level. Consequently, interest rates of NBRM bills had to be adjusted with the decline of the interest rates on the money market and on deposit auctions. For that reason, in November 1999, NBRM changed the maturity of the NBRM bills and reduced their interest rates. Thus, the most traded Central Bank bills that previously were with maturity of 30 days and interest rate of 10.0%, were changed into bills with maturity of 28 days and interest rate of 9.5%.