

2.1 Monetary and Credit Aggregates

1999 was a year of stagnation in real economic activity, with a corresponding slowdown in money and lending flows. The decrease in the real GDP, the banking crisis and the nominal depreciation of the kuna at the beginning of the year resulted in a complete stagnation in monetary and credit aggregates.

2.1.1 Total Liquid Assets

Total liquid assets decreased by 0.6 billion kuna in 1999, ending the year at 55.4 billion kuna. The structure of M4 did not change in 1999 compared to 1998. Foreign currency deposits accounted for 64 percent of M4, kuna deposits (including deposit money and kuna savings) for 30 percent and currency in circulation for 11 percent. At the end of 1998, they amounted to 65 percent, 30 percent and 10 percent respectively, almost the same as at the end of 1999. In the past years (from 1994 onward), the increase in foreign currency deposits resulted in a simultaneous increase in their share in M4 against a decrease in kuna deposits. However, it seems that two-thirds of M4 represents the "balanced" share of foreign currency savings in total liquid assets, which neither further increases nor decreases. Such a large share is a limitation that the monetary policy still has to reckon with, regardless of further success in preserving exchange rate and price stability.

Table II.1 Monetary and Credit Aggregates

	RESERVE MONEY (M0)	TOTAL LIQUID ASSETS (M 4)			Savings and time deposits	Foreign currency deposits	Total (M4)	NET DOMESTIC ASSETS (NDA)	NET FOREIGN ASSETS (NFA)
		Money supply (M 1)		Total (M1)					
		Currency in circulation (C)	Deposit money (DM)						
in billion kuna									
Dec. 31, 1997	10.3	5.3	8.4	13.7	5.5	31.3	50.7	33.8	16.9
Dec. 31, 1998	10.0	5.7	7.8	13.5	5.8	38.0	57.3	44.6	12.7
Dec. 31, 1999	10.3	6.0	7.9	13.9	5.9	37.0	56.7	40.0	16.7
Growth rate									
December-to-December									
1997	18.0	20.6	20.3	20.5	61.8	43.5	38.6	35.9	44.6
1998	-3.8	7.7	-7.3	-1.5	6.1	21.4	13.0	31.9	-24.8
1999	3.5	4.2	1.1	2.4	0.6	-2.6	-1.1	-10.4	31.3
Monthly average									
1997	1.4	1.6	1.6	1.6	4.1	3.1	2.8	2.6	3.1
1998	-0.3	0.6	-0.6	-0.1	0.5	1.6	1.0	2.3	-2.4
1999	0.3	0.3	0.1	0.2	0.1	-0.2	-0.1	-0.9	2.3

The household sector increased its share in the structure of M4. This was, above all, a result of a continued decrease in enterprises' deposit money, while the household sector managed to preserve its share in the liquidity. The share of household deposit money assets in M4 increased from 62.1 percent to 79.0 percent in 1999, while the share of enterprises' deposit money in M4 decreased from 31.3 percent to 17.5 percent.

During 1999, the money supply increased by a modest 0.4 million kuna and amounted to 13.9 billion kuna on 31 December 1999. This increase was the result of a 0.3 billion

kuna increase in currency in circulation and a 0.1 million kuna increase in deposit money. Within this, household deposit money rose by 0.2 billion kuna (8 percent) and enterprises' deposit money fell by 0.1 billion kuna (2 percent). Such developments show that the liquidity of the business sector continues to worsen, while there was a slight increase in money supply directed to the household. Similar developments also occurred in 1998, which indicates that the negative trends have continued. The settlement of outstanding debt announced by the government will positively affect the recovery of deposit money in 2000 and thus improve the supply of money to the economy.

Figure II.1 The Structure of Total Liquid assets (M4)

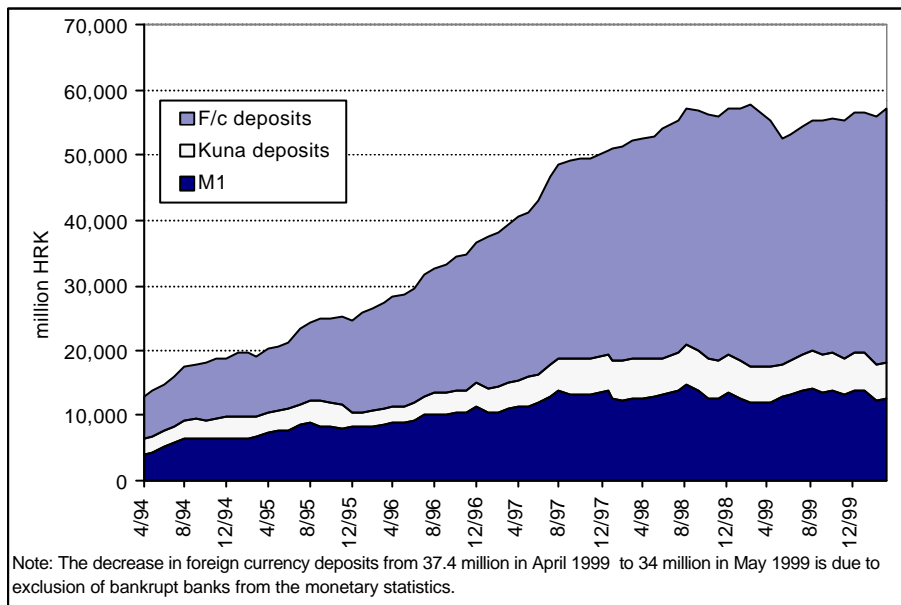
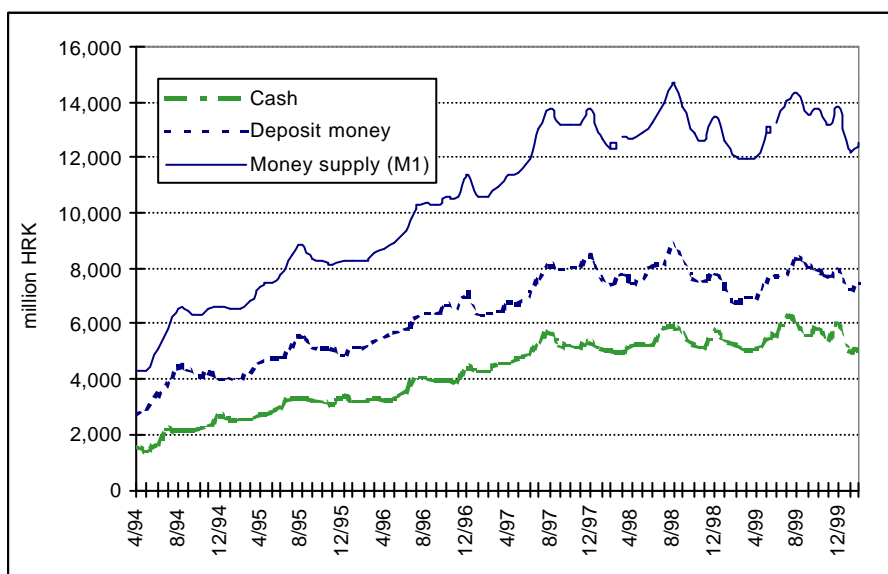


Figure II.2 Money Supply



Over the year, the largest decrease in the money supply (and in M4 as a whole) occurred in the first quarter. The second consecutive quarter of fall in real activity, the banking sector problems and especially the decrease in the nominal exchange rate resulted in an outflow of funds from domestic currency and from the domestic banking sector in general. At the end of the first quarter, the money supply stood at 12 billion kuna, a fall of 1.5 billion kuna (11.4 percent) compared to December 1998. This was caused not just by the general slowdown in economic activity but also by efforts to stabilize the exchange rate. The monetary policy measures (including increasing the reserve requirement rate, raising the discount rate, decreasing the volume of securities denominated in foreign currency eligible as collateral for Lombard loans, and intensive central bank intervention) were efficient in stopping the exchange rate fall; on the other hand, they resulted in a decrease in reserve money and in other monetary and credit aggregates in the short term.

Table II.2 Total Liquid Assets M4, million kuna and %

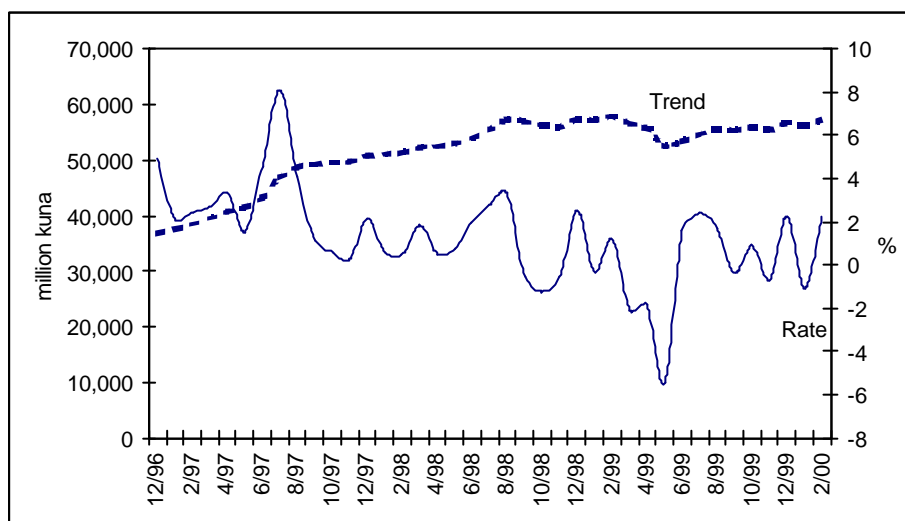
	AMOUNT			SHARE		
	Dec. 97	Dec. 98	Dec. 99	Dec. 97	Dec. 98	Dec. 99
TOTAL LIQUID ASSETS (M4)	50,742.0	57,340.2	56,698.5	100.0	100.0	100.0
1. Money supply	13,731.4	13,531.4	13,858.9	27.1	23.6	24.4
1.1. Currency in circulation	5,307.5	5,718.8	5,958.9	10.5	10.0	10.5
1.2. Deposit money of other domestic sectors	8,423.9	7,812.6	7,900.0	16.6	13.6	13.9
2. Non-monetary deposits (quasi-money)	37,010.6	43,808.8	42,839.6	72.9	76.4	75.6
2.1. Savings and time deposits	5,732.5	5,837.9	5,873.6	11.3	10.2	10.4
2.2. Foreign currency deposits	31,278.1	37,970.9	36,966.0	61.6	66.2	65.2
SECTORAL STRUCTURE OF M4						
Local government	698.5	719.1	627.4	1.4	1.3	1.1
Enterprises	10,934.3	10,057.2	9,503.3	21.5	17.5	16.8
Households	38,087.0	45,298.3	44,558.7	75.1	79.0	78.6
Other banking and financial institutions	1,022.3	1,265.5	2,009.2	2.0	2.2	3.5
TOTAL	50,742.0	57,340.2	56,698.5	100.0	100.0	100.0

There was an increase in demand for money by enterprises and households in the second quarter due to the establishment of exchange rate stability, the beginning of the resolution of the banking crisis, and a slowdown in the fall in real activity that occurred in this quarter. The fall in the money supply was halted at the beginning of the quarter, accompanied by a slight decrease in enterprises' deposit money and a slight increase in household deposit money and currency in circulation. This shows that the operations of enterprises had found some sort of balance in the difficult liquidity conditions, even though it was achieved through a relatively low level of output. The business cycle curve shows that the months-long decrease in demand for enterprises' deposit money was accompanied by worsening real indicators, confirming that the economy had undergone a period of recession. However, the same level of quarterly money supply, 12 billion kuna, fuelled the hope that the economy had passed through the lower end of the curve and that further decline would not take place. The April data showed that the economy was stagnating, with a lack of demand for money and credit, but also that the weakening of economic activity could be coming to an end.

The money supply did indeed rise slightly at the end of the quarter. The first signs of a turnaround in the money supply became visible in May. M1 again reached 12.9 billion kuna and, even more importantly, there was a recovery in the cash-deposit ratio in favor of enterprises' deposit money. The growth in the money supply and all monetary aggregates continued in June; it was the first significant increase in the course of the year. After fluctuating between 12 and 13 billion kuna since the fourth quarter of 1998, the money supply rose above 13.3 billion kuna due to an increase in currency in circulation and deposit money.

The money supply grew substantially by 1.3 billion kuna or 11 percent to 13.3 billion kuna at the end of that quarter. This would be the largest quarterly growth in the whole year.

Figure II.3 M4: Trend and Monthly Growth Rates



The positive trends seen in June continued in July and August. This substantial increase in the money supply was in accordance with the recovery of all the other indicators of economic activity. Both components of the money supply, currency in circulation and deposit money, increased. The money supply recovery that began in May continued through August thanks to seasonal effects; however, the September data again showed a decrease in both money supply components now that the season was over. Thus, overall data on monetary developments in the third quarter gave no ground for optimism. The negative trends seen in the previous periods continued with the same intensity. The total increase in the money supply in the third quarter was 0.3 million kuna, or 2.2 percent, and was significantly lower than in the second quarter. Only deposit money increased slightly, while currency in circulation decreased.

The fourth quarter was characterized by two substantial inflows – the sale of 35 percent of Croatian Telecom shares in October and the sale of Samurai bonds in December; however, they had no significant affect on the liquidity of the economy as a whole. In October, there was a marked improvement in government and bank liquidity, the money market interest rate decreased substantially due to the large supply, and the use of secondary liquidity sources were reduced to zero. This, however, had hardly any affect on private sector liquidity: private sector deposit

money (both enterprises and households) decreased again in October compared to September, in spite of the unusually high liquidity of the government and banks. The government used the increase in inflow of funds to settle its current liabilities to budget users but did not significantly settle its outstanding liabilities to private companies, causing a continuation in the fall of enterprises' deposit money. The decrease in the money supply continued in October, and it was only in December that it showed a slight increase. The fourth quarter showed a slight recovery, with the money supply ending 1999 at 14.1 billion kuna, only a little above the end-1998 amount of 13.5 billion kuna, signifying a year-on-year level increase of 0.3 billion kuna or 2.4 percent.

Foreign currency deposits, the component whose movements has the most significant effect on the movements of total liquid assets, decreased by 1 billion kuna or 2.6 percent compared to the end 1998 when they stood at 38 billion kuna. This can be explained by the fact that four banks ceased to be banks due to bankruptcy proceedings in April 1999 and were excluded from the monetary statistics, which analyses the consolidated balance sheet of the banking sector. The total foreign currency savings of these four banks (Glumina banka, Komercijalna banka, Gradska banka Osijek and Županijska banka) stood at 3 billion kuna and, due to their exclusion from the monetary statistics, foreign currency deposits decreased by the same amount. A portion of these savings will return as increased savings in domestic banks to the extent that the government fulfils its obligations towards the insured savings deposits in these four banks.

Excluding this structural break from the data series, the total increase in foreign currency deposits amounted to 2 billion kuna in 1999. Foreign currency savings increased substantially at the beginning of the first quarter of 1999. Each nominal depreciation of the kuna against the euro increases foreign currency savings and decreases kuna savings; this was the case in the first quarter, when the increase in foreign currency savings to a certain extent compensated for the sharp decrease in the money supply. However, problems in certain banks aroused suspicion in the stability of the domestic banking sector as a whole. The withdrawal of foreign currency savings from domestic banks began as early as February and continued in March and April when the problems of certain banks became headline news. The withdrawal of foreign currency savings deposits halted in May, and these savings then grew steadily from June to the end of the year. The return of foreign currency savings into domestic banks showed that there was a change in household perception from a complete distrust in the whole banking system to the awareness that the crisis was limited to particular banks and that the remaining part of the banking system was stable. The cumulative amount of withdrawals, about 1.8 billion kuna, never reached alarming proportions in terms of the overall banking system. In spite of the savings recovery at the end of the second quarter, the total decrease in foreign currency deposits over the quarter was over 4 billion kuna, of which 3 billion kuna due to the exit from the market of the four banks and the remainder due to an autonomous decrease in savings.

A sharp increase in foreign currency savings occurred in the third quarter, due to seasonal effects and the ascription of 5 percent of principal and 2.5 percent of interest on frozen foreign currency savings deposits, as well as an autonomous increase in savings. Although this increase was significantly less than in the same period in 1998 and 1997, it amounted to 1 billion kuna (3 percent), which is a substantial increase

bearing in mind the disturbances that had occurred in the banking sector in the second quarter.

The fourth quarter brought about no significant changes compared to the previous quarters. The monthly growth in foreign currency savings stood at 0.3 billion kuna and represented a relatively modest but continuing increase. The data available for the beginning of 2000 show an increase in foreign currency savings of a monthly average of about 1 billion kuna. Total foreign currency savings in all sectors were 37 billion kuna at the end of 1999.

Table II.3 Net Domestic Assets, million kuna and %

	AMOUNT			SHARE		
	Dec. 97	Dec. 98	Dec. 99	Dec. 97	Dec. 98	Dec. 99
1. Net domestic assets	33,828.9	44,626.8	40,003.8	35.9	31.9	-10.4
Assets						
1. Claims on central government (net)	9,525.7	9,916.3	12,899.2	-40.3	4.1	30.1
2. Placements	48,863.4	59,792.0	55,875.1	45.9	22.4	-6.6
3. Other assets (net)	-24,560.2	-25,081.5	-28,770.5	0.0	2.1	14.7
Liabilities						
1. Total liquid assets (M4)	50,742.0	57,340.3	56,698.6	38.7	13.0	-1.1
2. Foreign liabilities (net)	-16,913.0	-12,713.5	-16,694.8	44.4	-24.8	31.3

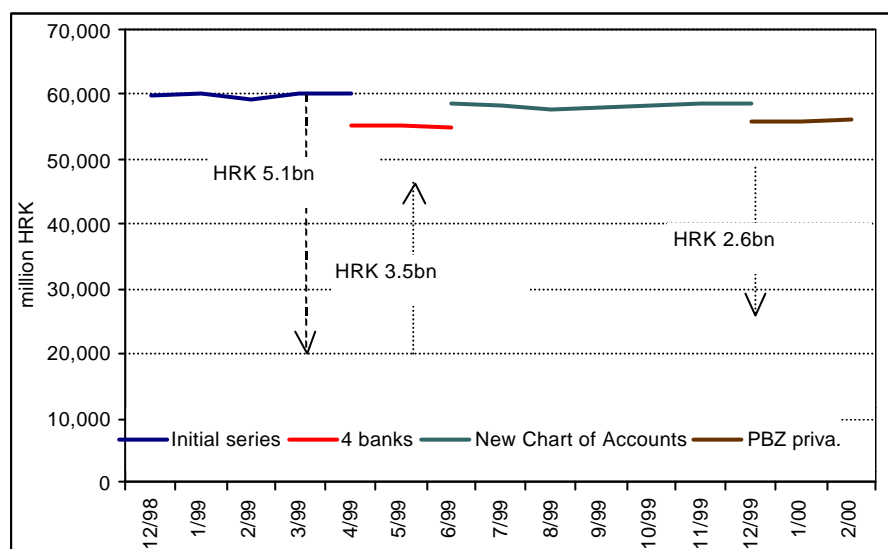
2.1.2 Credit Aggregates

The movements in bank lending in the domestic economy in 1999 can be summed up as representing complete stagnation; its growth rate amounted to 0.7 percent compared to the end of 1998. However, all the methodological changes made in the course of the year that influenced the final placements figure should be taken into account before drawing conclusions. In April, the amount of placements decreased by 5.1 billion kuna from 60.1 billion kuna to 55 billion kuna due to the exit of the four bankrupt banks from the monetary statistics. However, while savings remain frozen until the final settlement of government obligations to insured depositors, this is not the case with placements; these were extended to clients and financed a real demand for goods and services but were excluded from the total increase in lending to domestic sectors.

In addition, the new Chart of Account was implemented in July, which records placements on a gross basis. This change of reporting principle resulted in a 3.5 billion kuna increase in placements. It also resulted in an increase in capital accounts: placements were increased by the value of doubtful debts, and the same amount was transferred as provisions to the liabilities side, i.e. capital accounts. Finally, during the privatization of Privredna banka Zagreb, one portion of the bank's claims on public enterprises (they were all reprogrammed in accordance with the London Club agreement) was transferred to the State Agency for Deposit Insurance and Bank Rehabilitation, which resulted in a decrease in the Privredna banka Zagreb balance sheet of 2.6 billion kuna.

Raw data indicate that placements decreased by 3.9 billion kuna or 6.5 percent. On the other hand, the adjusted data that do not include the influence of the mentioned changes show a growth of 0.4 billion kuna or 0.7 percent. In any case, the growth in placements was insignificant and confirms that it was a stagnant year in which the economy was burdened with problems and could not generate creditworthy demand. In addition, the banks were cautious in granting loans due to the provisions of the new Banking Law and in reaction to the changes in the banking environment.

Figure II.4 Adjusted Placements



There was an 8.6 percent increase in lending to households and a 14.5 percent decrease in lending to enterprises, according to non-adjusted data. All the above-mentioned methodological changes occurred in the subsector of lending to public enterprises, so the substantial decrease of 14.5 percent does not reflect the decrease in loans to private enterprises.

Lending to households also underwent a qualitative change in 1999. The increase in long-term loans indexed to foreign currency (with the maturity period up to and over 1 year) was modest, while the increase in current account overdrafts was substantial. Such developments were facilitated by the favorable terms for current account overdrafts that some commercial banks, especially at the end of third quarter, started to grant to their clients. However, the stagnation in long-term loans indicates that banks were more conservative in lending to the biggest credit segment, and also that households became more cautious about taking new loans. Anyhow, the financing of durable consumer goods, including automobiles and construction project, was very modest in 1999 compared to 1998 and especially 1997.

Loans granted to domestic sectors (excluding the central government) amounted to 52 billion kuna on 31 December 1999; 61 percent were granted to enterprises and 37 percent to households, while the local government sector and other banks and financial institutions sector received the remainder. It should be noted that at present housing savings banks play an insignificant role in the domestic financial market; according to the available data, they have not yet started to grant loans, so commercial banks remain the main source of loans to households.

The central government's indebtedness to domestic banks, after three years of decrease from 1994 to 1997 and stagnation in 1998, showed a sharp increase at the net level in 1999¹, which was certainly one of the reasons for the decrease in the supply of loans to other sectors. While there was a decrease in banks' claims on central government concerning bonds for blocked foreign currency savings deposits and 'big' bonds, due to regular settlement by the government of its liabilities, there was an increase in their other claims. The government was heavily indebted to the banking sector at the beginning of the first quarter. The second consecutive quarter of recession, a plunge in VAT revenues and other revenues, and the lack of adjustment of expenditures to liquidity problems forced the government to borrow additionally from banks. As a result, banks' kuna claims on central government increased by 3.2 billion kuna. Within this, the two largest items were: a 1.3 billion kuna increase in debt to the central bank and a 1.5 billion kuna increase in debt to domestic banks on bonds and bills (excluding the 'big' bonds, which are analyzed separately). The banking sector kuna claims on central government, 5 billion kuna in December 1998 and 8.3 billion kuna at the end of the first quarter, remained almost unchanged for the rest of the year. Only the structure of sources of funds changed by the end of the year: since the government repaid its debt to the central banks by the end of 1999 as it was obliged to do, it increased its debt to commercial banks with the result that the total amount of kuna claims remained unchanged.

The changes in central government deposits with the banking sector were again largely due to the privatization of Privredna banka Zagreb. As already mentioned, all loans removed from books were loans granted to public enterprises and reprogrammed in accordance with the London Club agreements. After the conclusion of these agreements, with the regulation of relations between end-users (mostly domestic enterprises), debtors (mostly domestic banks) and the government, banks' liabilities to foreign creditors became liabilities to the central government. When the claims of Privredna banka Zagreb based on these loans were removed from the books and transferred to the State Agency for Deposit Insurance and Bank Rehabilitation, the bank's liabilities to central government ceased to exist. As a result, total central government deposits (and other liabilities) with commercial banks decreased by about 2.8 billion kuna in December 1999 compared to November. Total deposits of central government with commercial banks were 6.2 billion kuna at the end of 1999, which is 1.5 billion kuna or 19.5 percent less than at the end of 1998.

The offset of central government liabilities to the banking sector against deposits held with banks caused an increase in commercial banks' net claims on the government, which rose from 9.9 billion kuna to 13 billion kuna, or by 30.1 percent, during 1999.

Commercial banks' foreign assets decreased by 0.36 billion kuna in 1999. This item reflects the methodological changes. The allocation of the foreign currency reserve requirement had to be adjusted to the new regulations by May 1999. According to the old regulations, banks were required to deposit 55 percent of their short-term

¹ Note that the relations between the central government and commercial banks are analyzed separately due to their importance and do not include the relations between banks and other sectors. The item "Claims on central government and funds (net)" report the mutual offset of banks' claims on central government and funds against the central government deposits with the banking sector. Loans extended by HBOR to domestic sectors are also included in this item due to the specific character of this banking institution.

household deposits with foreign banks; the new regulations, however, stipulated that half this amount must be deposited with the central bank. CNB bills denominated in foreign currency could also be purchased for this purpose. This decision was motivated above all by reasons of safety and stability. In addition, when the central bank deposits these unified foreign currency assets, it can obtain better conditions than when smaller banks make individual approaches to international financial markets. The central bank forwards all revenues earned on these deposits to the commercial banks. Thus the commercial banks decreased their claims on foreign banks and increased their claims on the central bank by the end of May 1999 due to the implementation of this decision. However, the commercial banks' foreign assets began to rise again from the end of the second quarter, partly due to the very modest credit activity of banks during the year. Banks invested their funds in the central bank, in Ministry of Finance bills and abroad, instead of in loans: these are non-risk placements which banks use to shelter their funds in anticipation of favorable developments in the domestic economy.

2.2 Monetary Policy Instruments in 1999

The main feature of 1999 was increased reliance on the central bank as lender of last resort in solving the liquidity problems of individual banking institutions. The government also relied more on the central bank in 1999 in order to finance the imbalance between current revenues and expenditures. The Croatian National Bank tightened its monetary policy last year, making more frequent use of instruments for sterilizing money in circulation and increasing interest rates in order to neutralize the negative effect of the high primary issue that resulted from the above-mentioned developments.

2.2.1 Relations with Government

The Croatian National Bank, in accordance with article 58 of the Law on the Croatian National Bank, granted short-term loans to the government during 1999 to help bridge temporary imbalances between budgetary revenues and expenditures. These loans were granted at a discount rate that increased in March 1999 from 5.9 percent to 7.9 percent.

Due to the worsened liquidity in the country, the limited possibility of borrowing abroad and the increase in demand for additional funds, government borrowing from the central bank was significantly higher than in 1988. However, borrowing did not exceed the legal limit of 5 percent of the budget for the current year. The Croatian National Bank granted the government ten short-term loans in 1999; average monthly borrowing ranged between 605.1 and 1,470.8 million kuna. The government settled all its obligations to the Croatian National Bank by 30 December 1999.

2.2.2 Relations with Commercial Banks

The central bank's dealings with commercial banks were mostly concerned with the granting of Lombard loans, carrying out repo auctions and granting short-term liquidity loans, a new instrument that was introduced in February 1999. The negative

effects of the primary issue were sterilized through the reserve requirement instrument and CNB bills denominated in kuna.

Table II.4 Stock of Croatian National Bank Loans, end of month, million kuna

	1998	1999			
	Dec.	March	June	Sept.	Dec.
I. LOANS GRANTED TO BANKS	1,044.4	1,627.3	1,598.9	1,887.0	1,401.0
Lombard loans	252.3	206.0	136.8	165.8	176.7
Short-term liquidity loans	-	1,035.3	1,115.2	1,081.0	929.0
Intervention loans	132.1	185.4	138.0	128.7	129.0
Repo arrangements	459.2	0.0	0.0	327.6	0.0
Pre-rehabilitation loans	0.0	0.0	0.0	0.0	0.0
Other loans	200.9	200.7	208.8	184.0	166.3
II. LOANS GRANTED TO THE MoF	0.0	1,270.0	1,370.0	1,370.0	0.0
Long-term loans	0.0	0.0	0.0	0.0	0.0
Short-term loans	0.0	1,270.0	1,370.0	1,370.0	0.0
Foreign exchange loans	0.0	0.0	0.0	0.0	0.0
TOTAL	1,044.4	2,897.3	2,968.9	3,257.0	1,401.0

Lombard Loans

Lombard loans granted by the Croatian National Bank against pledged CNB bills and Ministry of Finance bills underwent several changes in the course of the year. The interest rate charged on this loan increased from 12 percent to 13 percent in March. In the same month, however, the ability to use Lombard loans against pledged CNB bills denominated in foreign currency decreased from 50 percent to 40 percent of the pledged amount in April and to 30 percent at the beginning of May. Lombard loans could still be used in the amount up to 50 percent of the nominal value of other pledged securities.

The next change, made in April, was part of a set of changes in monetary policy measures and instruments resulting from adjustment to the operating rules of the Croatian Large Value Payment System (CLVPS) which, introduced in April 1999, improved monetary control among other things. Since Saturday was determined a non-working day for the CLVPS system, the maximum number of days for the use of a Lombard loan in one month was reduced from 18 to 15.

Also in April, the provisions of the decision that regulated the use of a Lombard loan for one day at the interest rate of 7 percent were revoked. Instead, with the introduction of the CLVPS, banks are allowed to use, on their settlement accounts, the daily limit which is an integral part of the amount that may be used for Lombard loan purposes, and no fee is charged. In such circumstances, the Lombard loan is granted only at the end of working day.

The main features of December 1999 and January 2000, taking into account the problem of transition into 2000, were the increase in the amount of Lombard loan that may be used with respect to the amount of pledged CNB bills and other securities and the change in the maximum number of utilization days.

The average annual amount of Lombard loans used by banks and savings banks in 1999 was 155.4 billion kuna. The minimum average monthly amount was 42.9 million kuna in October, and the maximum average monthly amount was 302.8 million kuna in March. Banks and savings banks used Lombard loans on average 22 days a month.

Short-Term Liquidity Loans

In February, the short-term liquidity loan became a new instrument of the Croatian National Bank's monetary policy. This loan was extended to banks, under the condition that they were solvent, in order to help them bridge their liquidity problems, mainly resulting from the increased insolvency within the economy that inevitably influenced the financial institutions as well. Such a form of financing by the central bank was above all intended for institutions in which systemic risk was present, i.e. to those institutions whose liquidity problems might endanger the stability of the overall financial system.

The terms and conditions for granting and using a short-term liquidity loan were changed in December in order to strengthen this instrument as a source of liquidity at a time of extreme need. However, these changes left enough room for discretion in unforeseen circumstances. Modifications included the interest rate differentiation (it was linked to the interest rate charged on the Lombard loan), the change in period in which it may be used, and clearer definition of the conditions for its granting and of acceptable collateral.

9 banks used the short-term liquidity loan, with a partially penalizing interest rate of 14 percent, in 1999. The average use of this loan during the year was 1,005.3 million kuna. In terms of the overall system, the average monthly use increased from 374.0 million kuna in February to a maximum of 1,148.3 million kuna in August. Since the repayment of interest on the majority of short-term liquidity loans started in September, the use of these loans gradually decreased in the following period.

Intervention Loans

The intervention loan could not be excluded from the set of instruments of the Croatian National Bank in 1999 due to the organization of the payment system. Since some banking institutions were unable to obtain funds from other sources, they were forced to use this form of financing by the central bank.

During 1999, 11 banks and 6 savings banks used intervention loans at an annual interest rate of 19 percent. According to CNB statistical data, the average use of intervention loans during 1999 was 72.7 million kuna. However, the average use of intervention loans was 162.2 million kuna in the first four months of 1999 but decreased significantly in the rest of the year, with an average use of only 18.9 million kuna in the last five months. This significant decrease was due not just to repayment of a portion of the loans by a certain number of institutions but especially to the exclusion of bankrupt banks and savings banks from the statistical records, some of which have not yet repaid the intervention loans they were granted. Therefore, data from the accounting records of the Croatian National Bank should be considered as indicating the real amount of primary issue based on these loans. They show that the

total amount of used intervention loans stood at 129.0 million kuna at the end of the year, of which 19.7 million kuna of outstanding loans to two institutions that still operate and the remaining 109.3 million kuna of outstanding loans to bankrupt institutions.

The new Decision on Terms and Conditions for Granting Short-Term Intervention Loans that was passed in April 1999 adjusted this instrument to the operating terms of the CLVPS and provided a clearer definition of the instrument than the previous Decision.

Repo Auctions

The Croatian National Bank held 34 repo auctions of CNB bills and treasury bills in 1999, the same number as in 1998. This shows that the main feature of the last year was relative stagnation in the use of this monetary policy instrument, which is usually considered to be very effective and safe. With this instrument, the central banks helps the banking system to bridge liquidity problems and provides it with the exact amount of funds needed in a specific period of time. This feature of repo auctions is also the reason for their increasing use in developed financial systems.

The average emission on auctions held by the Croatian National Bank in 1999 was 363.5 million kuna, slightly larger than in 1998 (310.6 million kuna). The average number of banks (13) participating in auctions remained the same as in 1998.

The average weighted interest rate quoted at auctions ranged between 11.2 percent and 12.6 percent. The average annual weighted interest rate amounted to 12.3 percent, in contrast to 10.7 percent in 1998.

Table II.5 Survey of Repo Auctions, thousand kuna

Date of the auction	Total amount of bids accepted	Weighted interest rate (%)
January 5, 1999	408,716.0	11.22
January 11, 1999	550,378.0	11.93
January 15, 1999	399,914.0	11.96
January 19, 1999	281,713.0	11.98
January 22, 1999	230,306.0	12.01
January 27, 1999	230,102.0	12.00
January 28, 1999	216,417.0	12.02
February 5, 1999	328,791.0	12.03
February 11, 1999	455,682.0	12.03
February 16, 1999	481,115.0	12.04
March 10, 1999	538,691.0	12.03
March 17, 1999	498,229.0	12.57
March 23, 1999	601,896.0	12.46
April 1, 1999	454,069.0	12.53
April 12, 1999	154,017.0	12.62
April 22, 1999	320,575.0	12.52
April 29, 1999	493,430.0	12.52
May 4, 1999	721,372.0	12.52
May 7, 1999	432,643.0	12.52
May 14, 1999	557,060.0	12.52
May 19, 1999	152,956.0	12.52
May 21, 1999	362,961.0	12.51
May 25, 1999	372,671.0	12.51
June 9, 1999	274,858.0	12.51
June 14, 1999	361,611.0	12.50
July 7, 1999	285,077.0	12.50
July 14, 1999	111,852.0	12.51
July 30, 1999	148,047.0	12.51
August 10, 1999	538,034.0	12.50
September 23, 1999	261,675.0	12.50
September 27, 1999	270,391.0	12.50
September 30, 1999	327,567.0	12.50
October 5, 1999	234,102.0	12.50
December 1, 1999	303,762.0	12.50

Croatian National Bank Bills

Given the inadequate development of the government securities market for open-market operations and for sterilizing liquidity surpluses in the banking system, the Croatian National Bank continued to issue kuna denominated bills in 1999. It also issued foreign currency denominated bills in 1999.

The Croatian National Bank auctioned kuna denominated bills denominated in amounts of 100,000.00 through the multiple-price method with discount. Regular auctions were held each Wednesday, and banks and savings banks could purchase bills in kuna with maturities of 35, 91 and 182 days.

Several events that took place in 1999 resulted in significant fluctuations in the purchase of kuna bills in comparison with two years ago. The first was the crisis in liquidity of several institutions that resulted in a decrease in the purchase of kuna bills that lasted until April. At the end of March, the purchase of these bills fell almost below 500.0 million kuna. In addition, banks that faced liquidity problems sold their

stocks of bills to the Croatian National Bank prior to their maturity on several occasions during the year.

The purchase of kuna bills again showed a stable upward trend from April onwards, partly due to limitations in the use of Lombard loans on the basis of CNB bills denominated in foreign currency.

The Croatian National Bank held three additional auctions of kuna bills during 1999. Two auctions were held in October due to the sale of Croatian Telecom that generated a significant surplus of funds in the banking systems. As a result, the stock of purchased bill stood at more than 1,600.0 million kuna at the end of October. The third additional auction was held in December in order to sterilize the surplus of funds generated after the sale of Privredna banka Zagreb.

During the year, the interest rate on 35-day CNB kuna bills increased by 1.0 percentage point from 9.5 percent to 10.5 percent. The interest rate on 91-day CNB kuna bills increased by 1.05 percentage points from 10.50 percent to 11.5. The interest rate on 182-day CNB kuna bills increased by 1.5 percentage points from 11.0 percent to 12.5 percent.

The Croatian National Bank issued bills denominated in EUR and USD until the end of January 1999. When the euro became the common currency of the member states in the European economic and monetary union at the beginning of 1999, the Croatian National Bank replaced DEM with EUR in its operations. Foreign currency bills maturing in 63, 91, 182 and 364 days were sold with discount at auctions.

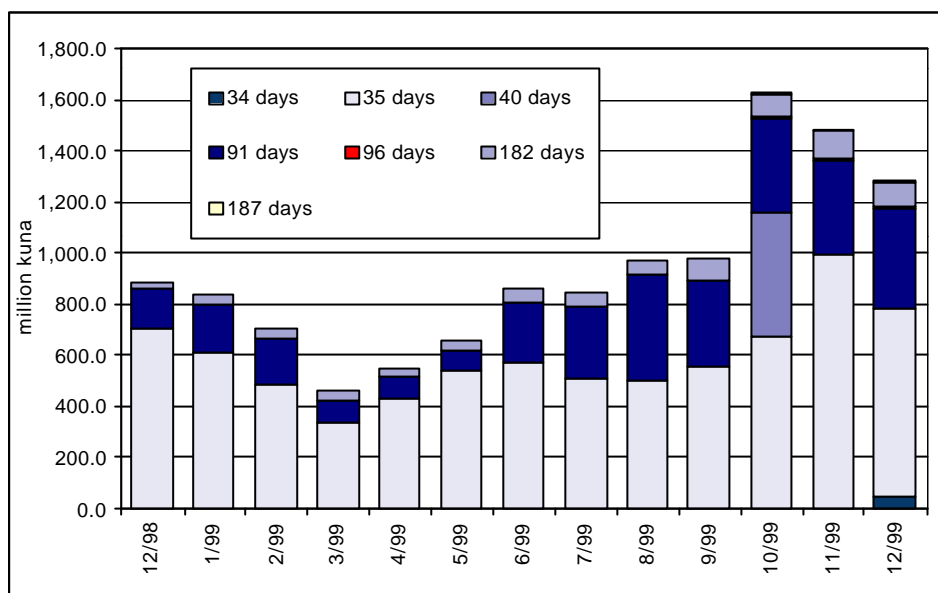
Table II.6 Survey of Croatian National Bank Kuna Bills Purchased by Maturity, nominal value, end of month, million kuna

	Maturity in days (regular auctions)			Maturity in days (additional auctions)				Total amount at the end of month
	35	91	182	34	40	96	187	
December 1998	700.0	161.1	26.0					887.1
January 1999	613.6	184.6	37.0					835.2
February 1999	488.7	176.1	33.0					697.8
March 1999	334.6	90.2	37.0					461.8
April 1999	428.9	86.2	37.0					552.1
May 1999	538.7	82.4	37.0					658.1
June 1999	570.3	235.4	59.0					864.7
July 1999	506.6	285.9	54.0					846.5
August 1999	500.2	412.6	57.0					969.8
September 1999	555.5	339.7	79.5					974.7
October 1999	668.6	373.2	91.5		485.0	3.5	2.5	1,624.3
November 1999	992.7	372.7	108.5			3.5	2.5	1,479.9
December 1999	741.5	394.3	97.0	41.3		3.5	2.5	1,280.1

Purchases of foreign currency denominated bills were more stable than purchases of kuna denominated bills, although they too were repurchased on several occasions before they matured. During the year, the stock of purchased foreign currency bills fluctuated, in kuna countervalue, between 1,400.0 and 1,800.0 million kuna, with banks preferring those with shorter maturity terms. On the other hand, the interest rates on foreign currency bills, which are set according to LIBOR, varied in larger ranges and were exposed to more frequent changes in trend movements. Their interest

rates were two times and even three times lower than the interest rates on kuna denominated bills. There was greater demand for shorter maturities in 1999, as in 1998, for both foreign currency denominated bills and kuna denominated bills.

Figure II.5 Survey of Croatian National Bank Kuna Bills Purchased by Maturity, nominal value, end of month, million kuna



Reserve Requirement

One of the basic long-term monetary policy goals of the Croatian National Bank is to increase the use of market-oriented instruments and to reduce the use of reserve requirement instruments. However, the Croatian National Bank was forced to use the reserve requirement in 1999 in the same manner as in previous years in order to sterilize the substantial effects of the primary issue, resulting from the reasons given above, and to preserve the stability of financial system and domestic currency.

Due to the need to tighten monetary policy during the year, the reserve requirement rate on kuna deposits increased from 29.5 percent to 30.5 percent in March. Other regulations on reserve requirement were changed in order to adjust them to the CLVPS.

The burden on banks was eased by the remuneration rate of 5.9 percent that was paid on the reserve requirement on kuna deposits placed with the Croatian National Bank and on the funds that banks were required to maintain on their settlement accounts.

Banks and savings banks are obliged to calculate the reserve requirement on both kuna and foreign currency deposits. In 1999, the reserve requirement on foreign currency deposits was calculated at 55 percent of the prescribed base (the average daily amount of household foreign currency deposits with a remaining maturity of 3 months in the calculation period). Of the total reserve requirement calculated on kuna deposits, banks and savings banks are required to deposit a minimum of 50 percent in

accounts that the CNB holds abroad and to hold a maximum of 50 percent of average daily balances in the accounts of liquid foreign exchange claims.

After the introduction of the euro as the common currency for the member states of European economic and monetary union in January 1999, the reserve requirement on foreign currency deposits was allocated in the euro or American dollar. Banks and savings banks were paid interest by the Croatian National Bank according to the remuneration rate on the reserve requirement on foreign currency deposits. The remuneration rate is determined by the market interest rate earned by the Croatian National Bank on the portfolio of foreign currency deposited by banks and savings banks.

Deposits on Foreign Financial Loans, Foreign Currency Deposits and Issued Guarantees

In 1999, banks authorized for external operations were obliged, when taking financial loans for conversion into kuna on the basis of agreements made in their name and for their account or in their name and for the account of another domestic person, to place kuna deposits in a special account with the central bank as follows: the amount of 30 percent of loans received with maturity up to 1 year, 10 percent of issued guarantees for loans for conversion into kuna with maturity up to 1 year, and 15 percent of the average daily balance of foreign currency deposits of foreign banks.

The provisions of the decision that regulated these obligations of banks changed during 1999 in order to be adjusted to the terms and conditions of the CLVPS. Therefore Saturday was excluded from the calculation since it is not considered a working day according to the CLVPS operating rules.

2.2.3 Croatian National Bank Interest Rates

The restrictive nature of the monetary policy, which was one of features of 1999, was reflected in changes in the interest rates of the Croatian National Bank. The interest rates of the Bank showed an upward trend during the year, which was in accordance with market trends, where there was also an increase in the general level of interest rates.

On the assets side, corrections were made in March, when the interest rate on Lombard loans increased from 12 percent to 13 percent and the discount rate from 5.9 percent to 7.9 percent. In addition, the provisions that regulate the interest rate on short-term liquidity loans changed in December. In accordance with the new provisions of the Decision on the Interest Rates of the Croatian National Bank, this rate was linked to the interest rate on Lombard loans, and the utilization period for liquidity loans was changed as well. This also confirmed the interest rate on Lombard loans as the reference rate of the Croatian National Bank.

During 1999, the level of interest rates earned on repo auctions also followed the upward trend in interest rates prevailing in the environment. The average weighted interest rate earned on repo auctions ranged between 11.2 percent and 12.6 percent, while the average annual weighted interest rate was 12.3 percent. This rate was 10.7 percent in 1998.

Deposit interest rates of the Croatian National Bank also followed an upward trend. During 1999, the interest rate increased from 9.50 percent to 10.5 percent on 35-day CNB kuna bills, from 10.50 percent to 11.55 percent on 91-day CNB bills and from 11.00 percent to 12.50 percent on 182-day CNB bills. On the other hand, the interest rate on CNB bills in foreign currency that is set in accordance with LIBOR changed substantially and was exposed to frequent change in the curve of movement. However, it still remained twice and even as three times lower than the interest rate on kuna CNB bills.