

CROATIAN NATIONAL BANK

2001

ANNUAL REPORT

2.1 Monetary Policy Instruments

The high liquidity of the banking system in 2001 did not require a large-scale use of secondary sources of liquidity but created a growing need for sterilization, which was mainly conducted by issuing kuna CNB bills and by means of the reserve requirement instrument.

In 2001, the monetary policy instruments of the Croatian National Bank, mainly those used for withdrawing liquidity, underwent certain changes. Further unification of the reserve requirements provided for a certain percentage of the calculated part of the reserve requirements to be allocated in kuna. In addition, a reduction in the reserve requirement rate was phased in, and the accounting base for foreign exchange and kuna reserve requirements was widened. Furthermore, the maturities of kuna CNB bills were changed and the frequency of auctions was reduced. To bring it in line with the Law on the Croatian National Bank, the instrument of short-term liquidity loan also had to undergo certain changes; these related to a more precise definition of assets acceptable as a pledge for loans. With regard to repo auctions, the banks entered into a Master Repurchase Agreement with the Croatian National Bank at the end of 2001. Further changes involved the deposit and credit interest rates of the Croatian National Bank. The Lombard rate was changed several times, and the remuneration rate, including remuneration charged for reserve requirements that are not maintained and not allocated, was also reduced.

2.1.1 Relations with Commercial Banks

Because of the high level of liquidity that prevailed most of the year, secondary sources of liquidity were used rarely and only for short periods of time.

Table 2.1 Stock of Croatian National Bank Loans
end of period, in million HRK

	2000	2001			
	Dec.	Mar.	Jun.	Sep.	Dec.
I. LOANS GRANTED TO BANKS	313.6	6.5	209.7	0.0	0.0
Lombard loans	0.0	0.0	0.0	0.0	0.0
Short-term liquidity loans	0.0	0.0	0.0	0.0	0.0
Intervention loans	14.0	6.5	1.7	0.0	0.0
Repo arrangements	299.6	0.0	208.0	0.0	0.0
Other loans	0.0	0.0	0.0	0.0	0.0

Lombard Loans

In 2001, banks and savings banks could use Lombard loans in the amount of up to 50% of the nominal value of purchased kuna CNB bills and T-bills of the Ministry of Finance and up to 30% of the nominal value of foreign exchange CNB bills, for a maximum of 15 working days in a month. The interest rate charged on this loan was changed several times during the year in line with monetary developments and interest rates developments in the market. The interest rate was lowered from 12% to 9.5% in May, increased to 10.5% in September and finally decreased to 10% in November.

The average monthly amount of Lombard loans used by banks and savings banks in 2001 was HRK 168.2m, compared with HRK 74.3m in 2000. The use of these loans varied greatly during the year. In January, the Lombard loan was used for one day only, in the amount of HRK 0.1m. By contrast, this facility was used much more by banks and savings banks in August and September, both with regard to the amount used and the number of days: the daily average of Lombard loans used by banks and savings banks was HRK 609.8m in August and HRK 768.7m in September, for a period of 14 and 9 days, respectively. It has to be stressed that the increased amount of Lombard loans used by banks was due to their more active participation in the foreign exchange market and not their need for primary liquidity. While the average use of Lombard loans was 11 days a month in 2000, it was only 4 days a month in 2001. There was a surplus liquidity in the system, so banks and savings banks did not need to borrow additionally from the central bank. In November and December, the banks and savings banks did not use Lombard loans at all.

Short-Term Liquidity Loans

In 2001, not a single bank or savings bank made use of short-term liquidity loans, the central bank's lender of last resort facility. Banks tended to satisfy their temporary liquidity needs with cheaper funds in the money market. The interest rate on the short-term liquidity loan was the interest rate on Lombard loans plus 0.5 percentage points for a loan utilization period of up to 3 months and 1 percentage point for longer utilization periods.

Intervention Loans

In December 2000, the Croatian National Bank decided to abolish intervention loans starting from February 2001, simultaneously with the introduction of the National Clearing System (NCS), i.e. small value payments settlement system. Only one intervention loan was granted in 2001 (in February). It was granted to Kaptol banka in the amount of HRK 2.9m. The total stock of intervention loans, including this loan and claims on banks and savings banks in bankruptcy proceedings arising from intervention loans granted in the previous years, amounted to HRK 111.7m at the end of the year.

Repo Auctions

The Croatian National Bank held nine repo auctions of CNB bills and T-bills in 2001, which is two auctions more than in 2000. Four auctions were held in April, two in both

June and October and one in September. These were the months in which the system's liquidity was lower. A total of HRK 4.2bn was placed at the auctions, which is 2.4 times more than in 2000. An average of HRK 465.9m was placed per auction. However, at the September auction, HRK 1,299.5m was placed to satisfy the additional liquidity needs arising from a new regulation prescribing that one part of the foreign exchange reserve requirements be allocated in kuna. The weighted interest rate at all auctions ranged between 4.64% and 7.23%, averaging 5.78%. There is a great difference compared with 2000: the average amount placed in 2001 was almost double the HRK 247.7m placed in 2000, while the average weighted interest rate in 2001 was almost half the 10.6% in 2000.

Table 2.2 Survey of Repo Auctions
in million HRK and %

Date of the auction	Total amount of offers accepted	Weighted interest rate (%)
11 April 2001	240.5	5.94
13 April 2001	541.7	6.00
18 April 2001	455.5	5.97
27 April 2001	373.4	6.00
14 June 2001	469.0	5.78
29 June 2001	208.0	5.37
10 September 2001	1,299.5	7.23
12 October 2001	568.9	5.01
31 October 2001	36.6	4.64

Reserve Requirements

In view of the growing orientation towards market-based instruments of monetary policy and a decreasing reliance on reserve requirements, this instrument underwent significant changes in 2001. The reserve requirement rate was lowered several times along with the widening of the calculation base. In June, received foreign exchange credits were included in the foreign exchange reserve requirement calculation base, and, in November, hybrid and subordinated instruments were included in the calculation base of both the kuna and foreign exchange reserve requirements. A more significant change in the basic elements of reserve requirements took place in September, with the beginning of the last phase of reserve requirement unification, i.e. the unification of the currency of the reserve requirements. The part of the unification process completed by then included the unification of the base with regard to type and maturity, the unification of the accounting and maintenance periods, and the unification of the percentage of allocation and maintenance and the reserve requirement calculation. A decision was enacted in September, stipulating that a specific part of the calculated foreign exchange reserve requirements be met by kuna and be added to the kuna reserve requirements. This part initially amounted to 20% of the calculated foreign exchange reserve requirements and was raised to 25% in November. Furthermore, the reserve requirement rate was lowered from 23.5% to 22% in September because of the policy of a long-term reduction in this rate. November saw a further cut in this rate, this time to 19%.

Until July 2001, the Croatian National Bank remunerated banks and savings banks for their kuna reserve requirements deposited in their accounts with the CNB at the rate of 4.5%. From August 2001, the remuneration paid to banks by the Croatian National Bank for their kuna reserve requirements held in their accounts with the CNB and maintained in their settlement accounts with the CNB fell to 3.5% a year. In September this rate was further cut to 2% a year. The remuneration rate on the foreign exchange reserve requirements set aside with the CNB equaled the market interest rate the CNB earned on the corresponding part of its portfolio abroad.

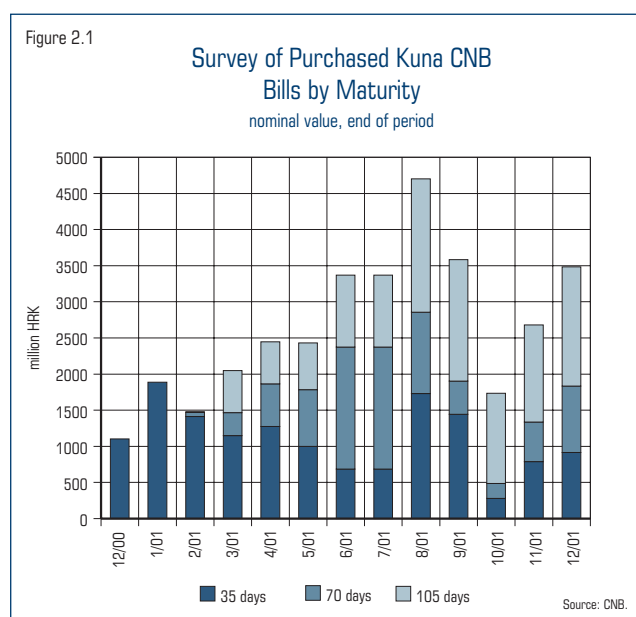
Croatian National Bank Bills in Kuna

Kuna CNB bills underwent several changes in 2001. At the beginning of the year, their maturities were 35, 91 and 182 days and they were auctioned every Wednesday. In

February 2001, a decision made by the Governor of the Croatian National Bank in December 2000 was implemented, prescribing new maturities of 35, 70 and 105 days and auctions to be held every fifth Wednesday instead of once a week. Kuna CNB bills in nominal amounts of 100,000.00 kuna were auctioned through the multiple-price method with discount. Against the background of such changes, the average monthly stock of purchased kuna CNB bills was HRK 2.9bn, which, compared with HRK 2.1bn in 2000, is an increase of 38%. The stock of purchased kuna CNB bills ranged between HRK 1.7bn and HRK 4.7bn during the year.

Table 2.3 Survey of Purchased Kuna CNB Bills by Maturity
nominal value, end of period, in million HRK

Year	Month	Maturity					Total
		35 days	70 days	91 day	105 days	182 days	
2000	December	1,103.0	–	1,025.3	–	458.6	2,586.9
2001	January	1,886.8	–	702.4	–	485.6	3,074.8
	February	1,413.1	56.5	578.7	8.5	412.6	2,469.4
	March	1,148.2	319.0	476.8	582.5	330.0	2,856.5
	April	1,273.5	591.0	–	583.5	175.0	2,623.0
	May	999.5	785.0	–	646.0	95.0	2,525.5
	June	685.7	1,689.7	–	993.6	50.0	3,419.0
	July	685.7	1,689.7	–	993.6	–	3,369.0
	August	1,729.0	1,126.5	–	1,844.6	–	4,700.1
	September	1,443.7	460.3	–	1,678.6	–	3,582.6
	October	279.5	205.0	–	1,249.0	–	1,733.5
	November	789.8	547.0	–	1,342.0	–	2,678.8
	December	914.8	920.0	–	1,651.0	–	3,485.8



Croatian National Bank Interest Rates and Remuneration

The high liquidity of the system and the interest rates fall on the money market affected central bank interest rates. The interest rate on the Lombard loan was reduced from 12% at the beginning of the year to 10% at year-end. Also, the remuneration charged for reserve requirements that were incorrectly calculated or not maintained was cut from 18% to 15%. The general trend of falling interest rates was reflected, albeit not

markedly, in the repo auctions of the Croatian National Bank. The average weighted interest rate achieved at repo auctions in 2001 was 5.78%, but it should be noted that the weighted interest rates at the first four auctions were above the average and that the interest rates at the remaining auctions were below the average. The September auction was an exception in that, due to a liquidity shortage, the amount of funds placed increased and the weighted interest rate was above average.

There were changes in deposit interest rates as well. The remuneration rate for the kuna part of the reserve requirements fell from 3.5% to 2% in September. The average weighted interest rates on 35-day kuna CNB bills fell from 6.64% in January to 3.36% in December. From February, when the new maturities were introduced, to December 2001, the average interest rates on 70-day CNB bills fell from 6.82% to 4.26%, and those on 105-day CNB bills fell from 6.97% to 4.85%.¹

2.2 The Use of Monetary Instruments in 2002 following the Announcement of Losses in Riječka banka

The media reports on the arrest of the chief dealer in Riječka banka d.d., Rijeka and the amount of losses incurred by this dealer caused a run on the bank by depositors seeking to withdraw their savings deposits. Thanks to its high liquidity level, the bank managed to provide funds for these significant withdrawals without outside help for several days.

However, the run on the bank didn't subside despite reassurances from high government and CNB officials. Therefore, on 18 March 2002, Riječka banka applied to the Croatian National Bank for a Lombard loan in the maximum amount possible. At that time, Riječka banka held in its portfolio purchased kuna CNB bills amounting to HRK 320m and purchased T-bills of the Ministry of Finance amounting to HRK 494m, totaling HRK 814m. Pursuant to a decision of the CNB on the terms and conditions for granting short-term liquidity loans (the Lombard loan) on the basis of pledged securities, the said T-bills and CNB bills met the criteria for pledged securities criteria on the basis of which Lombard loans may be granted up to the amount of 50% of their nominal value. Therefore, on 18 March 2002, Riječka banka was granted a Lombard loan in the amount of HRK 407m.

However, in view of the proportion of withdrawals and potential risks associated with them, the bank subsequently, on the same day, applied for the bills' repurchase before maturity by the CNB, pursuant to paragraph 2, item IV of the Decision on Issuing Croatian National Bank Bills Denominated in Kuna. The application was approved and the

¹ Until April 2001, the calculation of weighted deposit interest rates included interest rates achieved at extraordinary auctions.

Governor of the CNB issued a Decision on the repurchase of the kuna CNB bills before maturity whereby the CNB bills, amounting to nominally HRK 320m, were redeemed for HRK 317,199,512.32. This amount was used by Riječka banka for partial repayment of the Lombard loan. At the close of day on 18 March 2000, the Lombard loan balance with Riječka banka was HRK 89,800,487.68 against the pledge of T-bills of the Ministry of Finance amounting nominally to HRK 179.9m.

In addition to applying for the repurchase of kuna CNB bills before maturity, Riječka banka applied to the Croatian National Bank for a short-term liquidity loan on 18 March 2002. The application included a list of the Bank's assets, i.e. securities, which the Bank intended to pledge with the Croatian National Bank in exchange for the requested liquidity loan. On the basis of the Decision on the Short-Term Liquidity Loan, on 19 March 2002 the Croatian National Bank extended the requested liquidity loan to Riječka banka, amounting to HRK 408m, against securities falling due within two years. One part of the loan was used to repay the balance of the previously granted Lombard loan, amounting to HRK 89,800,487.68. Of the remaining HRK 318,199,512.32, HRK 233,637,585.00 was used for foreign exchange purchases from the Croatian National Bank, and the balance, amounting to HRK 84,561,927.32, was put into the settlement account of Riječka banka.

On 18 and 19 March 2002, Riječka banka had applied for foreign exchange purchases from the Croatian National Bank amounting to EUR 61,367,147.45 and USD 11m. This, using the CNB selling rate of 19 March 2002, totaled HRK 546,268,943.00. Therefore, the foreign exchange sale was partly covered by the liquidity loan, while the remaining HRK 312,631,358.00 was settled by Croatian National Bank purchases of T-bills.

After repaying the Lombard loan with the liquidity loan, Riječka banka received back its collateral consisting of T-bills of the Ministry of Finance. On 19 March 2002, it offered the said T-bills, amounting nominally to HRK 313,200,000.00, for redemption to the Croatian National Bank for the purpose of its foreign exchange purchase. The Croatian National Bank accepted the offer and redeemed the said nominal amount of T-bills for HRK 312,725,561.56. Of that amount, HRK 312,631,358.00 was used for the foreign exchange purchase, and the remaining HRK 94,203.56 was put into the settlement account of Riječka banka.

Following the extension of the HRK 408m liquidity loan on 19 March 2002, Riječka banka submitted another application for a short-term liquidity loan on the basis of securities with maturities of over 2 years. This type of loan requires a government guarantee, in line with a decision governing short-term liquidity loans. On 21 March 2002, the Government of the Republic of Croatia issued a guarantee on behalf of the Croatian National Bank in the amount of HRK 863,700,000.00, and the requested loan in the same amount was granted to Riječka banka.

Riječka banka did not utilize the whole amount of HRK 863,700,000.00 but, on 22 March 2002, requested the Croatian National Bank for a transfer of HRK 150m under the said loan. Simultaneously, Riječka banka put up for sale its remaining stock of T-bills of the Ministry of Finance, amounting to HRK 180,800,000.00 nominally. The Croatian

National Bank redeemed the said nominal amount of T-bills for HRK 179,776,365.32.

The T-bills redeemed from Riječka banka by the Croatian National Bank in the total nominal amount of HRK 494m partly fell due, while the remaining nominal amount of HRK 334m was sold in the secondary market.

On 22 March 2002, CNB claims on Riječka banka arising from the short-term liquidity loan totaled HRK 558m. The said amount was fully repaid on 9 April 2002, following the extension of a syndicated loan in the same amount to Riječka banka by commercial banks in Croatia.

From 10 April 2002, the Croatian National Bank had no further claims on Riječka banka.

Looking back at the events in Riječka banka, we can conclude that the bank, in one week and with the help of the central bank as the lender of last resort, managed to stabilize its liquidity and carry out all its banking activities without interruptions and without larger disturbances.

In the period from 18 March to 22 March, Riječka banka prevented the endangerment of its liquidity by promptly withdrawing a total of HRK 1bn in CNB loans (HRK 0.4bn Lombard loan and HRK 0.6bn in liquidity loan) and by selling securities to the central bank for HRK 0.8bn. Using the total of HRK 1.8bn from the primary issue, the bank purchased HRK 0.5bn of foreign exchange and improved its current liquidity by HRK 0.8bn, repaying at the same time the HRK 0.4bn Lombard facility.

As stated previously, Riječka banka repaid the HRK 558m worth of liquidity loan to the central bank on 9 April 2002. In this way, it settled all its obligations towards the CNB,

Table 2.4 Transactions between Riječka banka d.d., Rijeka and the Croatian National Bank in the Period between 18 March and 22 March 2002
in HRK

Transaction date	Utilized funds by type	Amount used	Purpose of funds used		
			Liquidity	Lombard loan repayment	Foreign exchange purchase
18 March	Lombard loan	407,000,000.0	407,000,000.0	0.0	0.0
18 March	CNB bills repurchased before maturity, HRK 320,000,000, nominal value	317,199,512.3	0.0	317,199,512.3	0.0
19 March	T-bills purchased HRK 313,200,000, nominal value	312,725,561.6	94,204.0	0.0	312,631,358.0 ^a
22 March	T-bills purchased HRK 180,800,000, nominal value	179,776,365.4	179,776,365.3	0.0	0.0
	Total T-bills purchased HRK 494,000,000, nominal value	492,501,926.9	179,870,569.3		312,631,358.0
19 March	Short-term liquidity loans with collateral of up to 2 years	408,000,000.0	84,561,927.3	89,800,487.7	233,637,585.0 ^b
22 March	Short-term liquidity loans with collateral of more than 2 years, guaranteed by the Croatian government, HRK 863,700,000	150,000,000.0	150,000,000.0	0.0	0.0
	Total short-term liquidity loans	558,000,000.0	234,561,927.3	89,800,487.7	233,637,585.0
	Total liquidity loans granted: HRK 1,271,700,000				
	of which: HRK 713,700,000 unused				
	Total	1,774,701,439.2	821,432,496.6	407,000,000.0	546,268,943.0 ^a

^a Riječka banka purchased from the CNB a total of EUR 61,367,147.45 and USD 11,000,000.

^b At the CNB selling rate.

and, by the end of the first ten-day period of April, all funds from the primary issue extended to Riječka banka by the CNB had been sterilized.

2.3 International Reserves Management in 2001

The total international reserves of the Croatian National Bank in 2001 increased by USD 1,152.0m, the largest growth since 1992, when they were set up. Compared with end-2000, the international reserves of the CNB increased by 32.7%. At end-2001, the total international reserves of the CNB stood at USD 4,676.6m, compared with USD 3,524.6m at end-2000.

Table 2.5 International Reserves^a
end of period, in million USD

Year	Month	Total reserves
2000	December	3,524.6
2001	January	3,393.9
	February	3,466.6
	March	3,513.9
	April	3,635.7
	May	3,694.3
	June	3,798.3
	July	4,175.6
	August	4,101.1
	September	4,416.1
	October	4,504.6
	November	4,614.7
	December	4,676.6 ^b
Change Jan.–Dec. 2001		1,152.0

^a Excluding reserve position in the IMF of USD 0.2m.

^b Excluding the effect of the first revaluation of securities and interest accrued on deposits (USD 27.4m on 31 December 2001).

The main factors contributing to the growth in total international reserves of USD 1,152m were

- ❑ net foreign exchange purchases in the amount of USD 374m;
- ❑ net foreign exchange purchases from the Ministry of Finance of the Republic of Croatia in the amount of USD 480m;
- ❑ gold and foreign exchange inflow arising from the succession amounting to USD 126m;
- ❑ income earned from (net) investment of CNB foreign exchange reserves amounting to USD 122m; and
- ❑ foreign exchange purchases arising from the sale of kuna cash amounting to USD 25m, with the total net effect of other transactions, including the exchange rate effect, amounting to USD 25m.

The Croatian National Bank intervened in the market by buying from and selling foreign exchange to,

- domestic banks, through auctions;
- Ministry of Finance of the Republic of Croatia; and
- foreign banks (in exchange for kuna cash).

At these interventions, the CNB purchased USD 1,320.66m and sold USD 440.79m worth of foreign exchange. Interventions in the domestic market increased total international reserves by USD 879.86m. With net purchases of this foreign exchange, the CNB issued HRK 7,296.64 of reserve money.

Monetary developments in 2001 were marked by a large foreign exchange inflow. With its interventions in the foreign exchange market, the Croatian National Bank sought to mitigate the fluctuation of the exchange rate of the kuna against the euro and especially to ease the appreciation pressures. With twenty-one auctions, the Croatian National Bank had a strong presence in the foreign exchange market in 2001.

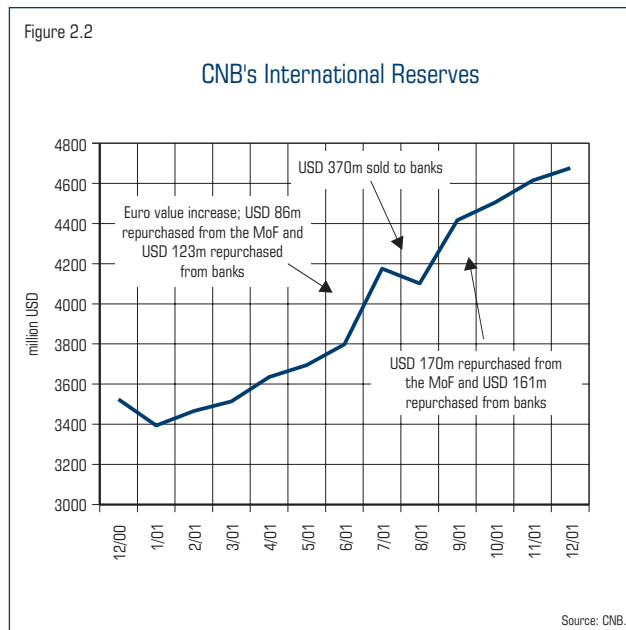


Table 2.6 Total CNB Turnover on the Foreign Exchange Market in the Period between 1 January 2001 and 31 December 2001 in million, at the exchange rate applicable on the intervention date

	Purchase		Sale		Difference	
	USD	HRK	USD	HRK	USD	HRK
Auction	811.37	6,756.36	436.92	3,636.09	374.44	-3,120.27
Ministry of Finance	482.32	3,981.09	2.30	19.33	480.02	-3,961.76
CNB bills repurchased before maturity	0.05	0.38	0.00	0.00	0.05	-0.38
Repurchases based on foreign exchange reserve requirements	0.04	0.29	0.00	0.00	0.04	-0.29
Sale of domestic currency cash	26.88	226.94	1.57	13.00	25.31	-213.94
TOTAL IN USD	1,320.66	10,965.06	440.79	3,668.42	879.86	-7,296.64
Foreign exchange inflow based on succession	8.32					
Foreign exchange inflow from the sale of gold	117.31					
TOTAL IN USD	125.64					

On 10 April 2001, in Brussels, the Republic of Croatia signed the Annex to the Agreement on Succession Issues for the distribution of part of the assets of the former SFRY deposited with the Bank for International Settlements in Basle (BIS). As a result of this Agreement, which stipulated that Croatia's share in the assets of the former SFRY in the accounts with the BIS was to be 28.49%, Croatia gained title over USD 8.32m in foreign exchange and 13.127 tons of gold bars.

The gold was sold to the BIS on two separate occasions. The yield on the total amount of succession gold sold (13.127t, i.e. 422,027.985 ounces) between 13 April and 25 September was 7.44% annually.

In managing the international reserves, the Croatian National Bank is guided by the principles of security and liquidity. The managers responsible for CNB portfolio management have strictly defined guidelines (benchmark portfolios) limiting exposure to financial risks in international reserves management. The yields on CNB international reserves investments are in line with the risks assumed. In view of the strictly defined investment criteria and guidelines for CNB international reserves management, the income on investing international reserves cannot vary significantly and is therefore very stable, even in conditions of great turmoil in financial markets.

The Croatian National Bank invests international reserves funds into high-quality instruments:

- government securities with fixed and variable interest rates;
- central bank instruments and instruments of international financial institutions;
- collateralized deposits (reverse repo agreements),
- deposits of commercial banks with a long history of investment rating of at least AA- ; and
- certificates of deposit.

The investment criteria prescribe the minimum credit rating of AA- for countries in which the international reserves of the CNB are invested. On 31 December 2001, 70.81% of total international reserves were invested in countries with an AAA rating.

Total profit from the investment of net international reserves was USD 121.96m.

The average yield on the CNB portfolio in EUR was 4.63%, and the average yield on the CNB portfolio in USD was 4.72%.

Table 2.7 Realized Income and Average Yields on CNB's Foreign Exchange Portfolios in 2001
at market value, in million EUR and USD and %

Portfolios	Realized income	Average amount invested	Annual yield rate		
	2001	2001	2001	2000	1999
EUR	96.4	2,072.5	4.63%	4.38%	2.81%
USD	42.5	894.1	4.72%	6.56%	5.02%