

## **IV. Monetary Policy**



Throughout 1994, BNB monetary policy was aimed at maintaining internal and external stability of the national currency. This was in response to an ominous increase in inflation – unlike 1993, when inflation had dropped to 64%, in 1994 it was nearly double that. The dramatic lev depreciation in March eroded credibility in the national currency and marked the beginning of a forex substitution. The faster growth rate of forex component relative to the lev component of money demand put additional strain on BNB efforts to control money supply. Under such conditions, monetary restriction appeared to have succeeded only in containing consumer price rises before they reached a hyperinflation level. However, even by year-end, BNB monetary policy failed to reverse the trend of accelerating annual inflation.

One factor which impeded monetary restriction was the bank system structure. As the LSNC was enforced, wide divergences between the yield and maturity of assets and liabilities of several big state-owned banks emerged. To be able to maintain the liquidity of the banking system, the BNB had to increase the funds for refinancing of these banks at the expense of reducing refinancing of other banks. Ultimately, scarcity of funds prompted growth in domestic interest rate levels across the board.

The foreign sector had a major impact on monetary policy in 1994. The lack of foreign financing in the first quarter put the forex market under severe seasonal strain and caused a sizable devaluation of the national currency. Later on, following the conclusion of a stand-by agreement with the IMF and restoration of official foreign financing, and a positive trade balance, Bulgaria's balance of payments improved. At that point, the BNB intervened to purchase any currency offered in the forex market in order to restock the country's foreign exchange reserves and make initial payments to the London Club creditor banks on the foreign debt reduction deal. Since the receipt of a portion of the official foreign financing was delayed and remained below amounts anticipated, the BNB strove to offset the difference through purchases. However, liquidity injected this way into the banking system could not be fully sterilized through open market operations and affected (albeit marginally) the growth in money supply.

During 1994, despite the higher inflation, cash deficit on the consolidated state budget remained under control, with no direct effects on monetary policy. Loose financial discipline and lack of rigorous budget constraints on a number of state-owned enterprises caused, however, a significant portion of credit resources to be disbursed for quasi-fiscal deficit financing in the real sector. This reduced loanable funds for viable projects. These factors combined with high interest rates to slow economic recovery.

Throughout 1994, modifications were made in the use of BNB monetary policy tools. Since the beginning of the second half-year, credit ceilings were abandoned and reserve money became the key instrument for money supply regulation. At the end of September, as mandated by the BNB Managing Board, a committee on monetary policy implementation was established. The decisions of this committee regarding daily adjustments of bank system liquidity provided for an improved balance between BNB operations in the domestic and forex markets and for compliance with general monetary policy.

# 1. Money Supply

Estimated money supply, including currency outside banks and all types of deposits, totaled BGL 418 billion, an increase of approximately BGL 184 billion. Compared with 1993, the nominal growth of this broadest monetary aggregate accelerated considerably – by approximately 26 percentage points in relative terms, or an increase of over BGL 100 billion in absolute terms. In real terms, however, broad money contracted by nearly 20%. This data suggests that BNB monetary policy is restrictive.

Comparing the average annual money supply growth with GDP leads to the same conclusion. Broad money grew at a nearly 68% annual rate over 1994, which is less than the GDP deflator<sup>28</sup>. As a result, the velocity of money supply slightly accelerated.

## Broad Money

Owing to a higher rate of inflation and low confidence in the lev in 1994, significant changes in the structure of broad money evolved. In contrast to 1993, in nominal terms, the forex component grew over 3.5 times faster than the lev component. Whereas real money demand in lev terms contracted by nearly one third, demand for foreign exchange in dollar terms increased more than 40%. This phenomenon helped to strongly reduce lev credit resources, and, despite moderate demand from government and nongovernment sectors, exerted pressure on monetary policy.

### MONETARY AGGREGATES GROWTH

Monetary aggregates	1993		1994	
	billion BGL	Dec.'92=100, %	billion BGL	Dec.'93=100, %
Money supply (broad money)	80.9	52.8	183.9	78.6
High-liquid money (M1)	10.5	27.7	26.8	55.5
Currency outside banks	6.9	37.7	13.3	53.1
Demand deposits	3.6	18.3	13.5	58.2
Quasi-money	69.6	62.2	152.4	83.9
Time deposits	50.6	85.1	55.0	50.0
Savings deposits	7.8	38.7	12.8	45.6
Deposits in foreign currency	11.3	34.8	84.6	193.9

Source: BNB.

## Monetary Aggregate M1

The higher rate of inflation prompted a doubling of nominal growth in M1 (this monetary aggregate includes currency outside banks and demand deposits) compared with 1993. In contrast to 1993, however, the components of highly liquid money grew at similar rates. In real terms, currency outside banks contracted by 31%, and demand deposits by 29%. Since there is no evidence to suggest economic agents have shifted away from cash payments, it can be assumed that cash circulation has accelerated considerably because of the higher inflationary taxes on cash holders. At the same time, sluggish economic activity did not reflect significantly on real changes in demand deposits dynamics – in 1993 they contracted by 28%.

## Quasi-money

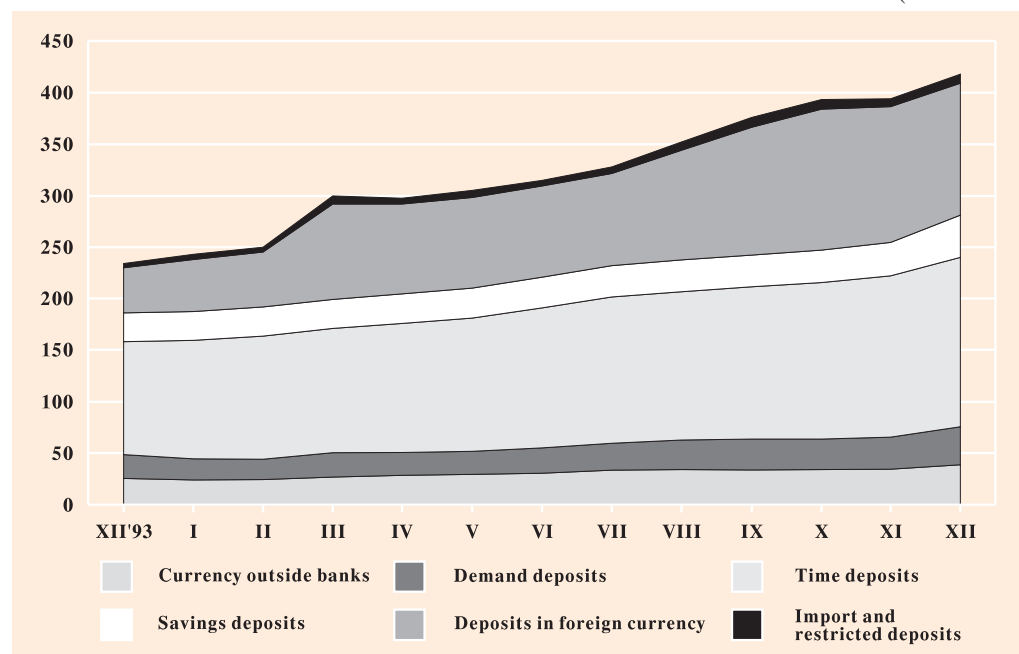
During the period under review, quasi-money, including time, savings and foreign currency deposits, grew more slowly than the monetary aggregate M1. The various components displayed different growth rates, attributable to shaken confidence in the lev in the wake of the March crisis in the forex market. In 1993, time deposits grew by nearly 13% in real terms, while in 1994 they dropped by more than 34%, several percentage points below the real contraction in currency outside banks over the year. The nominal growth rate lagged behind the average interest rate of accrual by 15 percentage points, which suggested that withdrawal from this type of

<sup>28</sup> BGL 543.5 billion based on GDP for 1994, and BGL 298.9 billion in 1993 – a real growth of 1.4%.

deposit could be estimated at over BGL 17 billion. This trend was evident throughout the year, with signs of partially renewed confidence in the national currency evident only in the last quarter of 1994. However, between March and September there were no such trends to offset eroded stability of the lev.

#### DEVELOPMENTS IN MONETARY AGGREGATES IN 1994

(billion BGL)

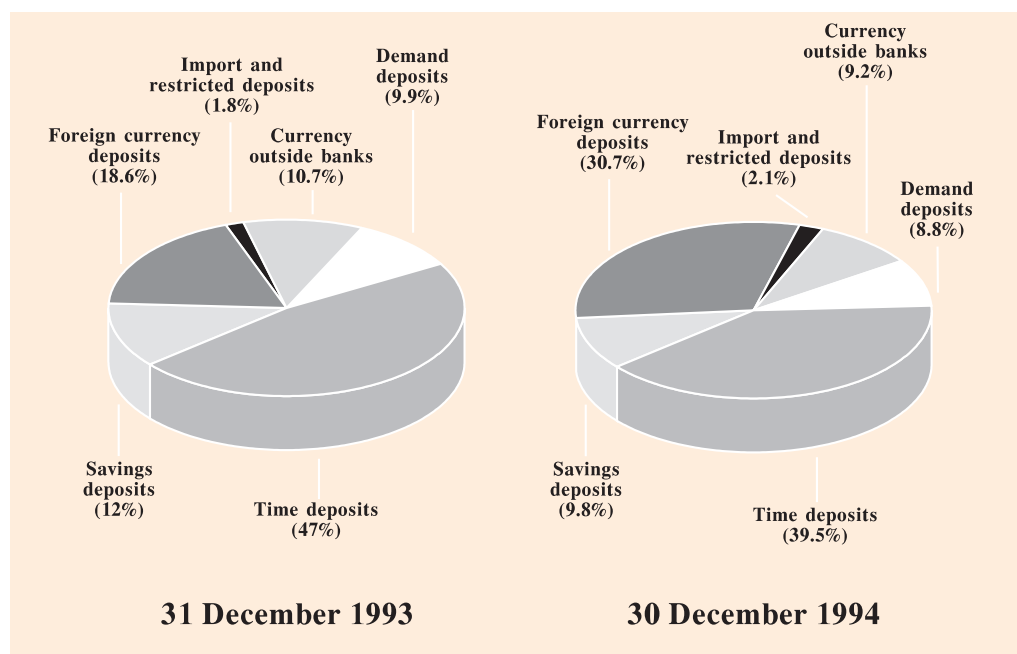


Source: BNB.

Foreign exchange deposits in 1994 – unlike in 1993, when they remained broadly unchanged – were the fastest growing component of broad money. Over the twelve-month period, they increased by USD 609 million, or 45.7% in dollar terms. The prime reason behind this high growth was a virtually absent interest rate differential between lev and foreign exchange deposits, consistent with the sharp lev devaluation in March and expectations for even further real devaluation of the national currency through year-end. Thus a sustainable forex substitution occurred, encompassing all types of deposit holders – individuals, state and private enterprises. Comparing time deposits growth with foreign exchange deposits growth suggests that approximately half of the lev equivalent of the increase in foreign exchange is the result of interest withdrawal from time deposits, and the remainder is attributable to full conversion of savings into foreign exchange. In annual terms, foreign exchange deposits grew from USD 95 million in the first quarter to USD 776 million by October. The decline of more than USD 150 million during the last two months cannot be viewed as revived confidence in the lev; rather, it mirrors temporary political instability which might have threatened future foreign exchange regulations.

Developments in money supply and its components in 1994 caused concern. Following the price jump in 1991, in 1992 and 1993 the growth in lev money supply exceeded overall money supply growth. Despite a contraction in real terms, the lev component of broad money was adequate in providing for credit resources, promoting consistent restriction and bringing inflation down. Eroded confidence in the lev in March 1994 did much to strip the national economy of credit sources. Throughout the year, monetary policy, while remaining restrictive, was under severe strain by real and government sectors. Adjustments made for the high rate of inflation fueled further acceleration in inflation.

## STRUCTURE OF MONEY SUPPLY



Source: BNB.

## 2. Reserve Money and Money Multiplier

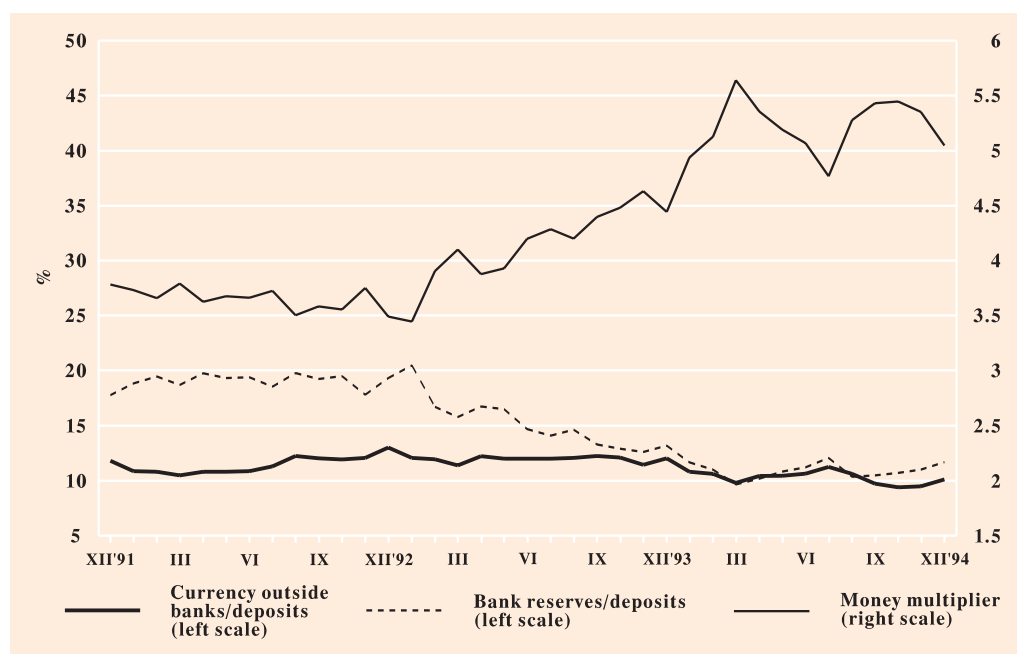
July 1994 saw an essential change in the ratio of applied monetary tools in favor of indirect tools. As of July 1994, the central bank stopped applying credit ceilings to subdue credit expansion. Money supply, regulated mainly through reserve money, became an intermediate monetary policy target.

In 1994, reserve money, including currency outside banks and bank reserves, grew BGL 30.1 billion. In relative terms, it increased 57.3%, or 20 percentage points less than money supply growth. The faster rate of growth of broad money relative to reserve money resulted in a 20% increase in money multiplier. In 1994, monthly developments in money multiplier remained volatile, which caused difficulties in forecasting, hence impeding money supply movement on projected trajectory, regulated through reserve money control.

Money outside banks displayed the slowest growth rate among reserve money components. This was attributable to the increased inflationary tax resulting in a drop in the ratio of currency outside banks to deposits. The latter reflected the preferences of firms and households and proved to be one of the factors responsible for money multiplier growth.

In 1994, bank reserves picked up 61.1%. Two major opposite factors were responsible for the developments of above indicator. An increase in minimum reserve requirements from 7% to 10% was the first measure used by the BNB to maintain internal and external stability of the lev through tighter monetary constraints. As a result, minimum reserve requirements rose approximately BGL 20 billion after March, as opposed to BGL 2.6 billion in the first quarter of 1994. The second factor related to tightened monetary constraints during the second half-year, reflecting a substantial drop in reserve overhang – from BGL 4.9 billion in December 1993 to BGL 2.2 billion one year later. Moreover, for several months in the second half of 1994, bank reserves stood below BGL 1 billion. The second factor had a stronger effect, prompting a 1.5 percentage point decrease in the bank reserves/deposits ratio in 1994. Under equalized other conditions, this change in preferences of commercial banks contributed to money multiplier growth as well.

## MONEY MULTIPLIER



Source: BNB.

Data about developments in reserve money and money multiplier is indicative of the extent to which they contributed to the money supply growth. Analysis indicated an equal effect of both factors, with reserve money contributing below 50%. Following the introduction of reserve money control as a tool to regulate money supply, significant changes occurred in the reviewed indicators. If fluctuations in individual months are disregarded, the broad money growth, on a six-month basis, was entirely at the expense of reserve money, while the slight decline in money multiplier had an insignificant repressive effect. The aforementioned conditions reveal prospects for improved results in 1995, using reserve money as a money supply regulator.

## RESERVE MONEY AND MONEY MULTIPLIER

Indicators	Dec.'93	June'94	Dec.'94
Broad money, billion BGL	234.1	315.2	418.0
Reserve money, billion BGL	52.7	62.5	82.8
Money multiplier	4.44	5.06	5.05
Currency outside banks/deposits, %	12.0	10.6	10.1
Bank reserves/deposits, %	13.2	11.2	11.7
Broad money change, billion BGL, including:		87.1	102.4
reserve money		42.5	104.3
money multiplier		38.7	-1.5
both factors		5.9	-0.4

Source: BNB.

Developments in reserve money reflected monetary policy tools used by the BNB. Compared with the first half-year, analysis of reserve money sources revealed essential changes in BNB monetary policy during the second half-year. Between January and June of 1994, BNB claims on commercial banks were the major factor responsible for the reserve money growth, irrespective of the use of credit ceilings. Lombard and discount loans were among the most widely used monetary policy tools, reflecting liquidity shortfalls of commercial banks with the largest amounts of bonds issued under the LSNC, as well as increased borrowing requirements of the

real sector. During the period under review, reduced direct pressure of the budget on the monetary policy allowed to maintain a small cash deficit, but this was largely at the expense of accumulated quasi-fiscal deficits in real and banking sectors, financed by the BNB through commercial banks. During the second half of 1994, BNB monetary policy implied tighter constraints in terms of commercial banks. The share of BNB claims on commercial banks decreased to 20% in the reserve money growth. Changes in the use of monetary policy tools signaled a continuing forced refinancing (through Lombard loans) of banks with liquidity shortfalls, due to LSNC bonds, at the expense of dramatic withdrawing of funds from other banks. Tightened monetary policy affected the real sector (since discount loans dramatically declined), as well as a number of commercial banks which had to use relatively expensive overdrafts to maintain their liquidity.

#### DEVELOPMENTS IN MONEY SUPPLY BY RESERVE MONEY SOURCE

(billion BGL)

Indicators	June 1994	December 1994
Reserve money sources	42.5	104.3
claims on the government	-21.1	61.4
claims on commercial banks	66.0	21.6
including:		
Lombard loans	44.0	40.9
discount loans	17.5	-30.8
overdraft	-3.7	21.6
other	-2.4	21.0

Source: BNB.

At the same time, government pressure increased, resulting in an approximately 60% increase in reserve money. Under these conditions, control over money supply growth, and inflation growth through tight constraint proved to be possible only by crowding out the real sector from the credit market, which in turn adversely affected economic recovery.

### 3. Domestic Credit

Throughout 1994, domestic credit growth, including credits in levs and foreign exchange to real and government sectors, significantly lagged behind money supply growth. There were two important reasons for the slower domestic credit growth compared with broad money growth. First was repayments on Bulgaria's foreign debt deal, as well as accounting of the written-off debt to London Club creditor banks in Bulbank's balance sheet. This operation, as well as the assumption of foreign exchange debt of state-owned enterprises as a government debt as per the LSNC in mid-1994, affected seriously the time series of a number of credit aggregates which impeded comparisons with previous years. In 1994, the lev component of domestic credit lagged behind the forex component growth by 11 percentage points. If the amount of reduced domestic credit in foreign exchange, owing to the foreign debt deal with London Club creditor banks, is taken into account, the decline in the lev component is even more significant. Taking into account the credits written-off, the amount of the foreign exchange credits (in US dollars), extended mainly to the private sector, grew. This signals a continuing dollarization of the national economy which, however, is not so clearly pronounced as in deposits. Notwithstanding, this eroded banks' stability due to increasing credit risk.

Despite the reduced foreign exchange claims on the government, domestic credit to the government sector exceeded by approximately 10 percentage points that to the real sector. This pertains to the conversion of foreign exchange credits of state-owned enterprises, worth USD 1.8 billion, into government bonds issued under the LSNC, which was reflected in banks' balance sheets in July and August. Thus, only rates of growth in lev credits to both sectors are comparable.



#### DOMESTIC CREDIT GROWTH IN 1994

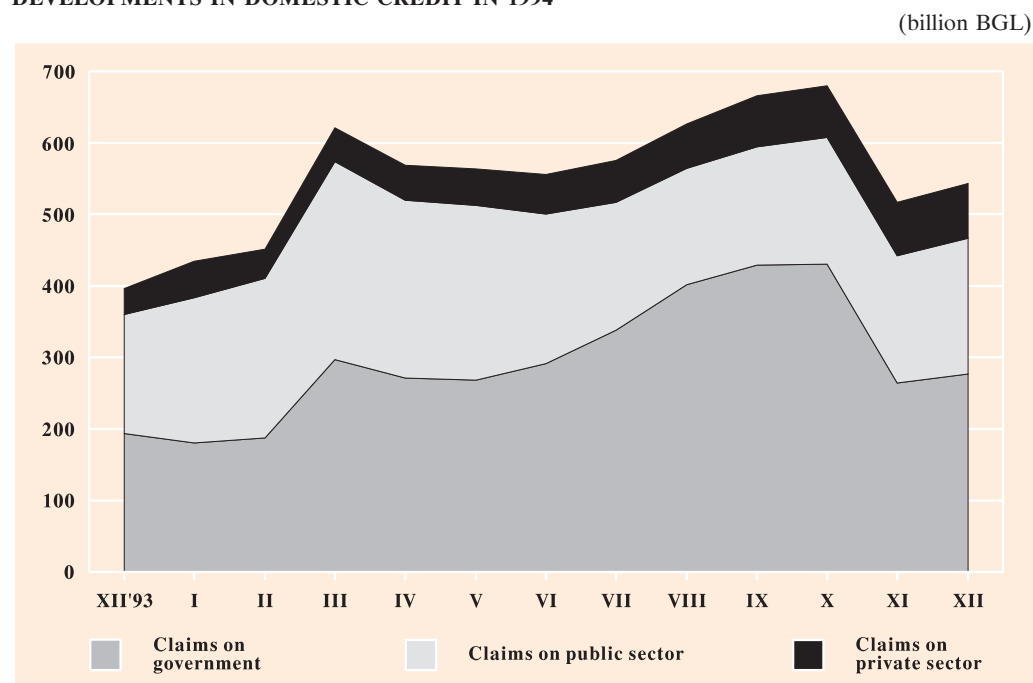
Indicators	billion BGL	Dec.'93=100, %
Domestic credit	145.9	36.8
BGL	63.9	31.3
foreign currencies	82.0	42.7
Government sector	82.1	42.4
BGL	15.8	15.3
foreign currencies	66.3	73.3
Real sector	63.8	31.5
BGL	48.2	47.6
foreign currencies	15.6	15.4

Source: BNB.

Due to the restrictive fiscal policy pursued by the government, the lev claims on the government sector increased 1/3 faster than the claims on the real sector. Enhanced extrabudgetary funds also contributed to moderate bank lending to the whole government sector. Reduced demand for credit to finance the cash deficit allowed for 3/4 of all lev resources to be directed to the real sector. However, there are no grounds to assume that a significant change was made in allocation of these resources, since a substantial portion of them was used to finance quasi-fiscal deficits.

Data collection on lev and foreign exchange credits, disbursed to private enterprises, initiated in 1993, allowed a more precise assessment of changes in credit to this subsector. Lev credit grew almost equally (48%) for both private and state-owned enterprises, but in absolute terms lev credit to the private sector comprised only 1/4 of the total lev credit to the economy, a share close to that in GDP produced.

#### DEVELOPMENTS IN DOMESTIC CREDIT IN 1994

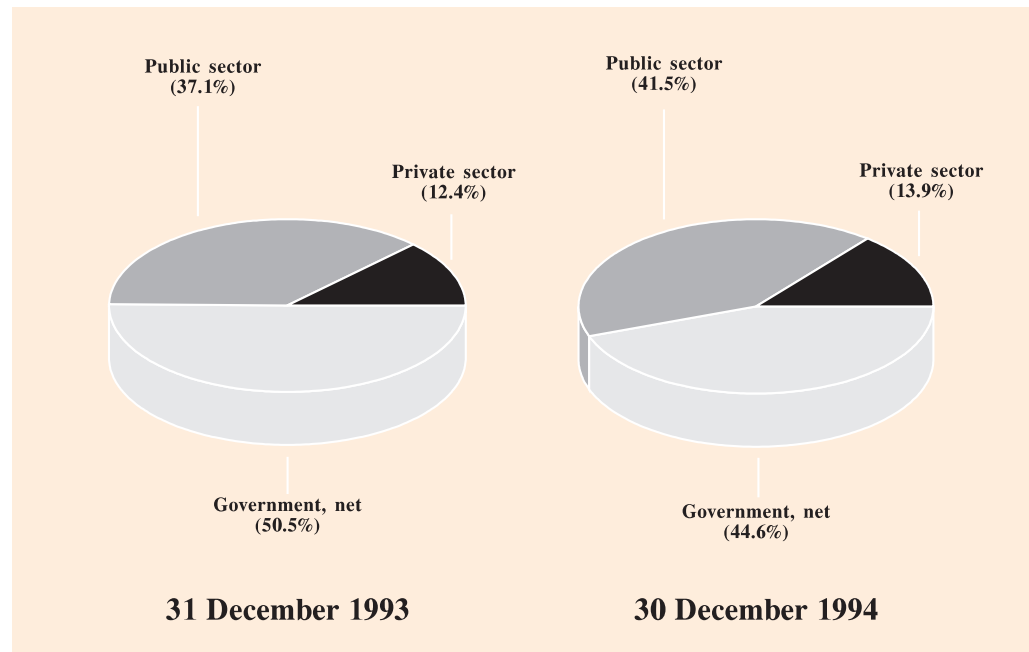


Source: BNB.

Forex lending to the private sector was much more intensive, increasing BGL 28.5 billion, or 270% in 1994. Substantial growth was registered in US dollars as well, 83.5%, or USD 269 million. This exceeded by over 40% foreign currency deposits growth over the year. It is difficult to assess whether credit dollarization

was a result of export orientation of private enterprises. It is more reasonable to assume that it reflected shaken confidence in the lev as well as the interest rate differential which occurred as a result of relatively stabilized lev after the sharp devaluation in March. To this end, in case of a new dramatic lev devaluation the conditions for servicing forex credits of private and state-owned enterprises will significantly change, making these credits nonperforming. This will erode the banking sector's stability further.

**STRUCTURE OF DOMESTIC CREDIT  
(lev component)**



Source: BNB.

## 4. Monetary Instruments and the Money Market

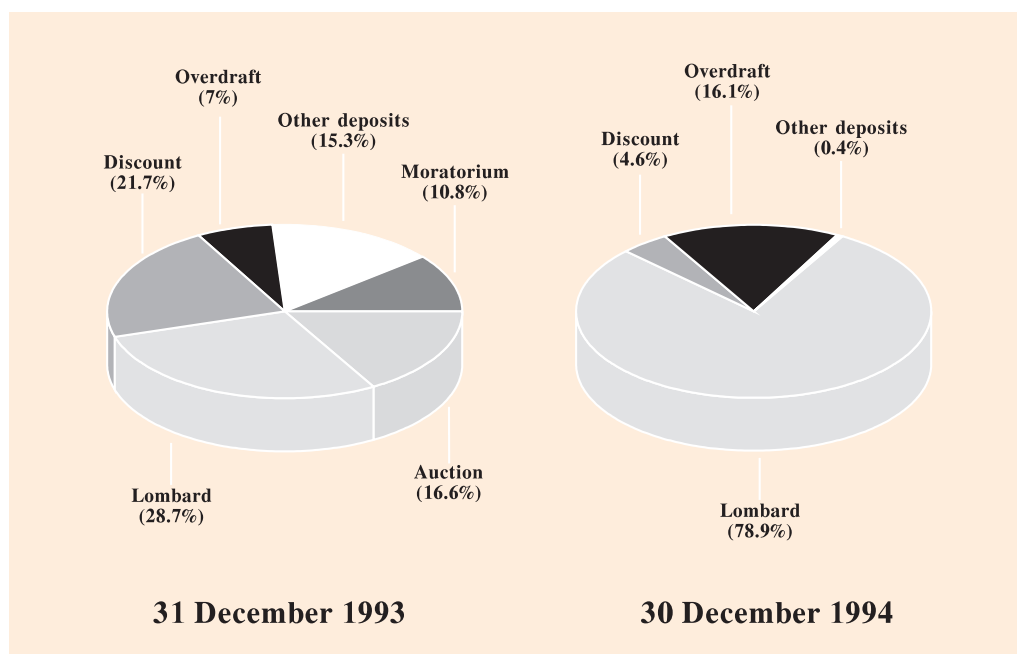
### Refinancing of Commercial Banks in National Currency

As of 31 December 1994, funds extended by the BNB to refinance commercial banks totaled BGL 28,561 million, including overdrafts of BGL 4,631 million. This accounts for an increase of BGL 12,803 million, or 81.2% from 31 December 1993.

An analysis of BNB restrictive monetary policy indicates that in 1994 47% of commercial banks maintained their liquidity without borrowing from the BNB, 24% used funds within the permitted overdraft, and 29% of commercial banks were extended Lombard and discount loans and other deposits. In spite of BNB measures to improve the liquidity of one commercial bank by repurchasing government long-term bonds issued under the LSNC, worth BGL 9,460 million, at their nominal value, the funds received by two commercial banks increased by BGL 15,092 million, or 312.5%, comprising 77.7% of total BNB refinancing of commercial banks at year-end.

In structural aspect, as of 31 December 1994, the share of loans granted against collateral was the largest (78.9%), followed by overdraft used (16.1%), and discount loans (4.6%).

**STRUCTURE OF ACTUAL DEPOSIT  
AND LOAN ARREARS OF COMMERCIAL BANKS**



Source: BNB.

**Deposit  
Auctions**

From January to June 1994, the BNB held only 9 interbank lev deposit auctions. Unsecured deposits totaling BGL 7,600 million were extended to commercial banks. This accounted for 25.5% of deposits placed in the first half of 1993. Given the development of open market operations, including regularly held weekly auctions for repo-agreements for purchase and reverse repurchase of government securities, interbank lev deposit auctions ceased as a form of unsecured commercial bank refinancing.

**Lombard  
Loans**

Dramatic monthly changes evolved in the volume and structure of Lombard loans throughout 1994. Given the deteriorated liquidity of some commercial banks, the BNB in March began to extend Lombard loans against a pledge of lev bonds issued under the LSNC; and as of June 1994, against a pledge of bonds denominated in US dollars. As a result, the volume of Lombard loans increased dramatically. With the exception of August, when the BNB repurchased lev bonds at their nominal value from Economic Bank under the LSNC and reduced the funds for its refinancing by the bonds' equivalent, over the year the volume of Lombard loans increased significantly and as of 31 December 1994 reached BGL 22,544 million, an increase of BGL 17,996 from 31 December 1993.

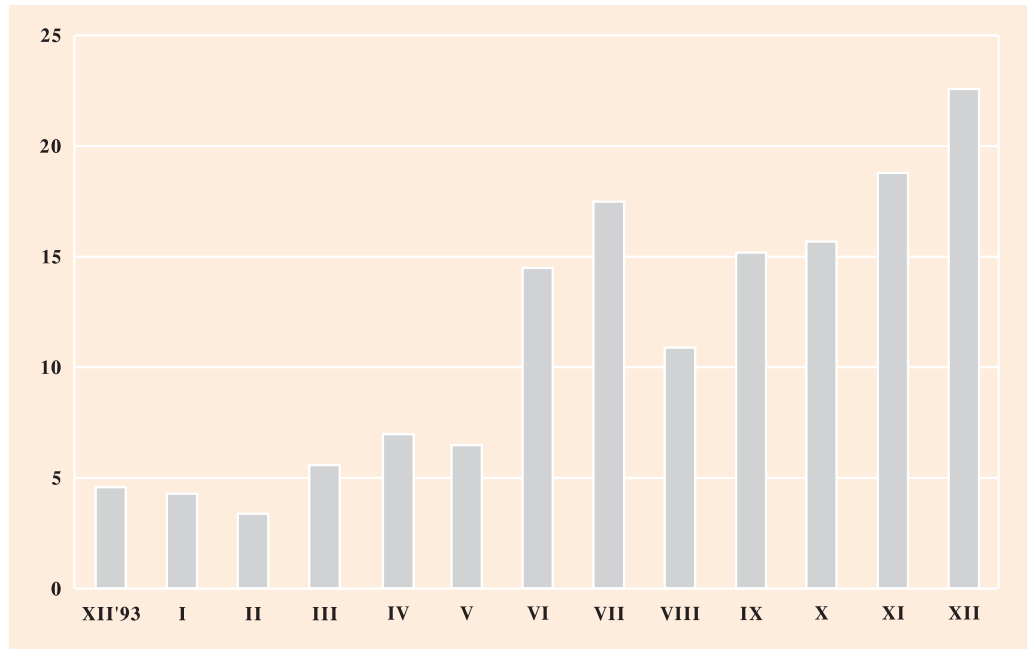
From January to December of 1994, 337 Lombard loans totaling BGL 125,542 million were extended, and 341 Lombard loans totaling BGL 107,546 million were repaid. The number of commercial banks receiving Lombard loans fell dramatically; as a result, by 31 December 1994, Lombard loans were extended to 8 banks, versus 19 banks during 1993. Further, in 1994, 92% of the total Lombard loan amount was extended to only two commercial banks.

Structurally, as of 1994 year-end, Lombard loans were allocated as follows: loans extended against a pledge of long-term government bonds, 94.3%; loans extended against a pledge of lev bonds issued under the LSNC, 2.9%; against USD-denominated bonds, 86.1%; and loans granted against a pledge of bonds as per CM Decrees of 1991, 1993 and 1994, 5.2%. Since in September the BNB Board adopted a resolution, extending Lombard loans against a pledge of commercial paper – bills of exchange and promissory notes – the share of such Lombard loans accounted for 5.7% as of 31 December 1994. Over the reporting period, four commercial banks used Lombard loans against a pledge of commercial paper; two of the banks did not

repay the loans upon maturity, and five bills of exchange from one commercial bank were protested.

**LOMBARD LOAN GROWTH IN 1994**

(billion BGL)

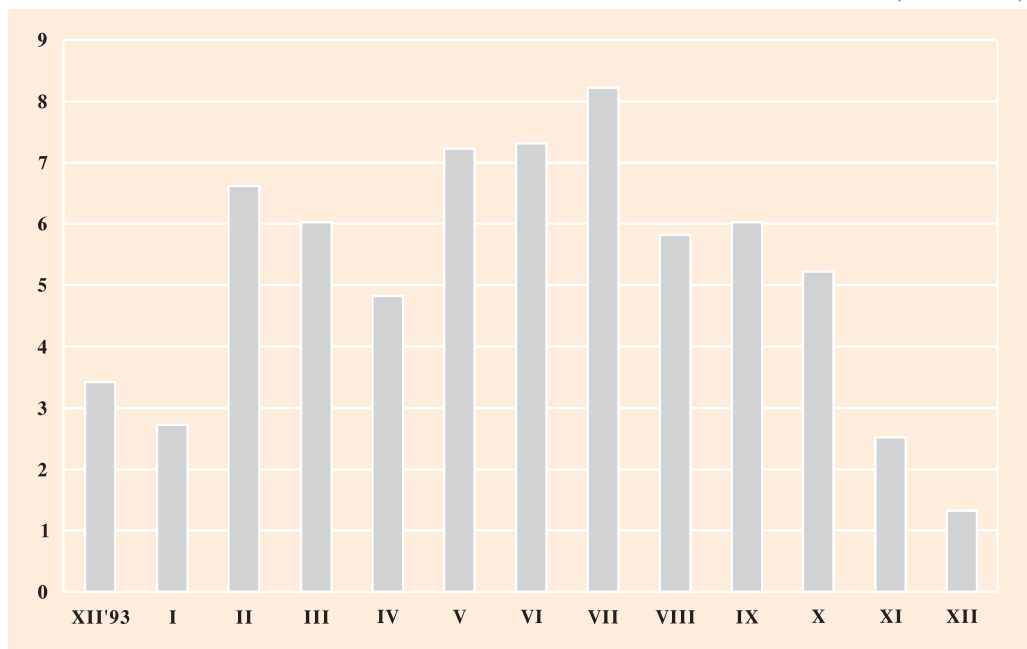


Source: BNB.

During the period under review, the volume and number of Lombard loans extended against a pledge of treasury bills issued by the MF to cover the budget deficit decreased; as a result, there were no progressively outstanding loans against that type of collateral by 1994 year-end.

**DISCOUNT LOAN GROWTH IN 1994**

(billion BGL)



Source: BNB.

## Discount Loans

Throughout January – December 1994, 386 promissory notes and bills of exchange in the amount of BGL 50,455 million were discounted, including 166 for agriculture totaling BGL 22,300 million, and other 220 totaling BGL 28,155 million. 358 promissory notes and bills of exchange in the amount of BGL 49,190 million were repaid, including 161 of BGL 22,000 million for agriculture. In 1994, discount loans grew BGL 39,300 million (an increase of 273 in number) from one year ago, including an increase of 68 discount loans of BGL 18,200 million for agriculture.

As of 31 December 1994, discount loans outstanding totaled BGL 1,265 million, including past-due loans of BGL 473 million due to lack of funds on transaction accounts of some commercial banks. Compared with 1993, debt on discount loans declined by BGL 2,134 million.

## Short-term Deposits

During the period under review, banks continued to avail themselves of the opportunity created by the BNB Board resolution on extension of deposits by the BNB as a lender of last resort, as was necessary to meet temporary or permanent liquidity shortfalls. This practice ceased on 30 September 1994, when the BNB Board discontinued depositing BNB funds into commercial banks.

From January to 30 September 1994, the BNB extended 457 short-term unsecured deposits to commercial banks; short-term unsecured deposits with a term of 1 – 3 days made up the largest share. Several banks have used this type of deposit for a longer term despite the high interest rate, which hit 220% at end-August. As a result of deteriorated liquidity and scarcity of bank funds as of 30 September 1994, 4 deposits of BGL 242 million were not repaid. As of 31 December 1994, outstanding deposits decreased to BGL 21 million, due from one bank.

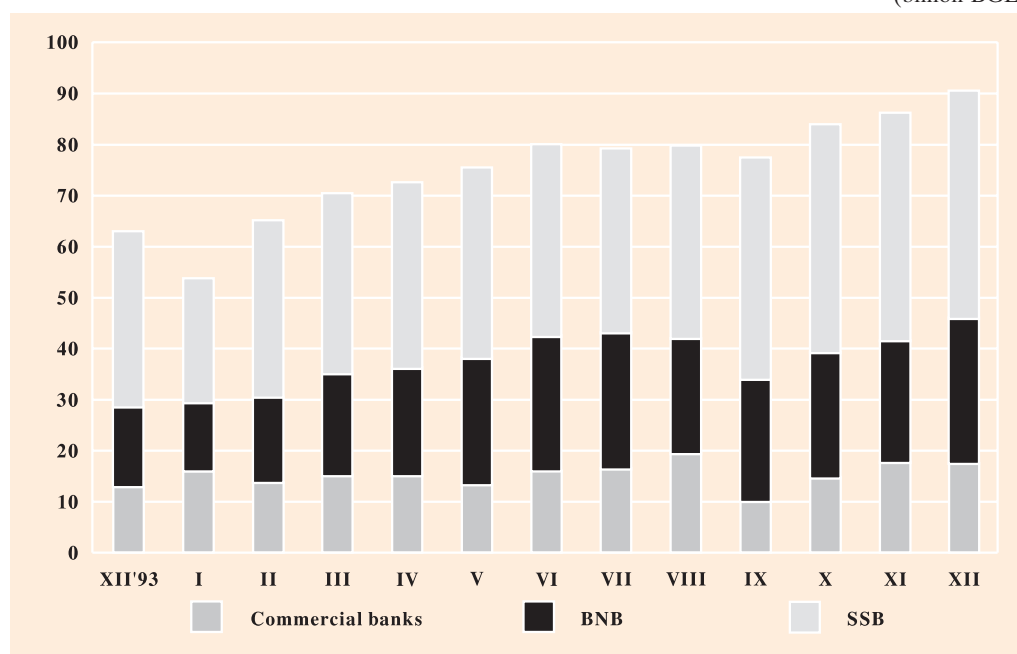
Four commercial banks experiencing serious liquidity problems throughout the year were permitted, as per the BNB Board resolution in compliance with Article 30, paragraph 3 of the Law on BNB, to use 25 short-term unsecured deposits worth BGL 18,938 million, as was necessary to meet urgent liquidity requirements. As of 31 December 1994, one deposit of BGL 100 million remained unpaid due to a later maturity term.

## Open Market Operations

Compared with 1993, open market operations began to play a major role as an instrument of liquidity regulation in the banking system. As open market operations (carried out on a daily basis in 1994) were employed, the share of government se-

VOLUME OF MONEY MARKET IN 1994

(billion BGL)



Source: BNB.

curities transactions in the interbank market expanded, while unsecured deposits decreased.

Total turnover of open market operations rose fourfold from one year ago, and by the end of the reporting period reached BGL 810,719 million. The share of repo-agreements was the largest, 94% of total volume, with an average maturity of 10 days. The repo-purchases were conducted mostly through auctions announced in advance by the BNB, and held at least 15 days thereafter.

Gradually, in the context of monetary policy goals, the BNB limited direct extension of funds in the money market – during the second half of the year the share of repo-agreements of the type repo-sale increased, comprising 86% of total repo-agreements at year-end.

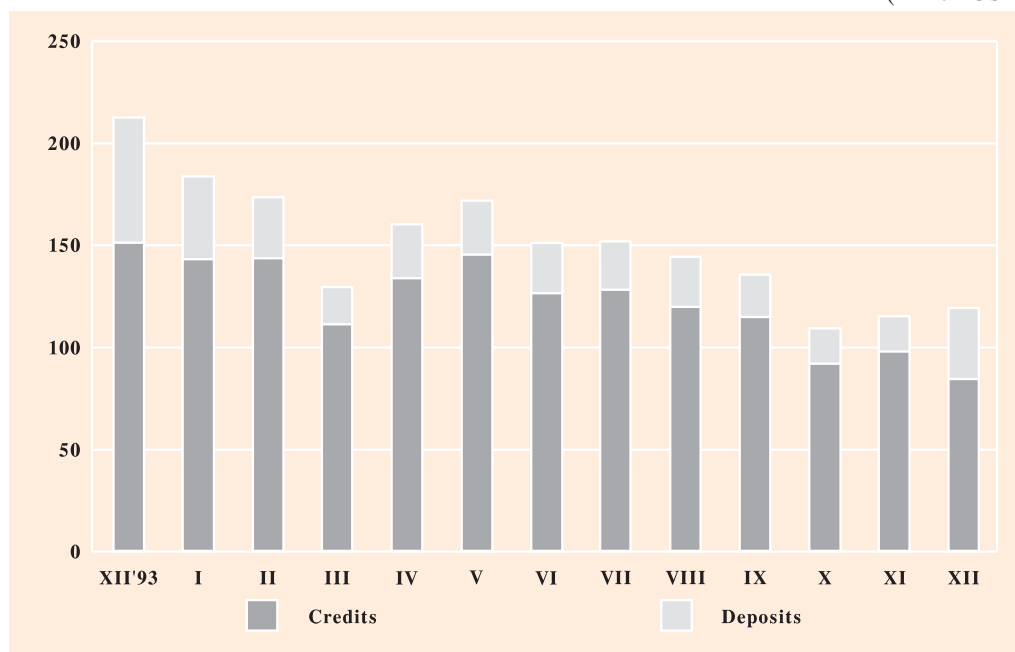
## Refinancing of Commercial Banks in Foreign Currency

### Foreign Exchange Credits

In the absence of a special financial institution for funding import/export operations, the BNB continued to refinance commercial banks extending discount loans in foreign exchange against pledges of 3-month commercial securities (promissory notes). The volume of forex refinancing over 1994 tended to decline gradually. By the end of 1994, the amount of forex credits extended to commercial banks totaled USD 84.3 million versus USD 151.1 million at the end of 1993, a decrease of USD 66.8 million, or 44.2%. The US dollar and Deutschemark were used for forex credits. A 9% annual interest rate was applied to credits denominated in US dollars and Deutschemarks. Compared with one year ago, interest rates for USD-denominated credits increased 1.5 percentage points (7.5% per annum), while interest rates on DEM-denominated credits remained unchanged.

REFINANCING OF COMMERCIAL BANKS IN FOREIGN CURRENCY IN 1994

(million USD)



Source: BNB.

### Foreign Exchange Deposits

In addition, the BNB continued to extend forex deposits to commercial banks in 1994. After some fluctuations in 1993, the volume of BNB forex deposits with banks slightly decreased (except for a growth of approximately USD 17 million in December). By the end of 1994, forex deposits totaled USD 34.4 million versus USD 61 million at the end of 1993, a fall of USD 26.6 million, or 43.6%. Forex deposits were also denominated in US dollars and Deutschemarks. Annual interest

rates were 8% in the first half-year and 6.5% – 8% in the second half-year on USD-denominated deposits, and 7% – 9% in the first half-year and 7% in the second half-year on DEM-denominated deposits, compared with interest rates of 6.5% – 7% for both types of deposits in 1993.

### **Minimum Reserve Requirements**

In 1994, the BNB continued to use minimum reserve requirements as a monetary policy tool. Minimum reserve requirements were raised from 7% to 8% on attracted resources to help curb forex market crisis in March. By Resolution No. 197 of 16 June 1994, the BNB Board approved cash holdings in levs of the SSB and commercial banks up to the amount of 60% of the actual cash holdings at a 10% monthly rate of increase to be recognized as minimum reserves, effective as of July until December 1994. Later, by Resolution No. 229 of 21 July 1994, minimum reserve requirements were raised from 8% to 9% in July, and fixed at 10% in August; and a 12% annual interest was accrued on the paid-in minimum reserve requirements from 1 August 1994. To encourage nonbank financing of the cash deficit, as of September 1994 the BNB accrued interest at half the effective basic interest rate on the minimum reserve requirements paid in levs by commercial banks and the SSB, up to the amount equivalent to book-entry government securities sold to physical or legal persons (nonbank institutions).

With a view to improving forex liquidity, beginning 31 August 1994 commercial banks were allowed to hold in foreign exchange up to 20% of their minimum reserve requirements paid to the BNB on attracted forex resources. By Resolution No. 332 of 27 October 1994, the BNB Board approved cash holdings up to 15% of the actual cash holdings in foreign exchange at a 5% monthly rate of increase to be recognized as minimum reserve requirements, effective as of October until December 1994.

To promote commercial bank participation in the primary market of government securities, for a period between October – December 1994 commercial banks were allowed to account the absolute surplus minimum reserve requirements over paid-in reserves in September 1994 in government securities, issued after October 1994 under the terms of Regulations No. 5. With a view to improving efficiency of reserve money control, the BNB Board approved the SSB minimum reserve requirements to be gradually replenished until 31 December 1994 to the required 10% of attracted resources.

By the end of 1994, minimum reserve requirements with the BNB, based on the consolidated balance sheet, totaled BGL 36,647,479,000, i.e. a threefold increase relative to 1993. The USD/BGL exchange rate, reaching BGL 66.015 on 31 December 1994 versus BGL 32.711 one year ago, added to this growth as well.

### **Credit Ceilings**

The restrictive character of 1994 monetary policy entailed further limitation of commercial bank credit expansion. For this purpose the BNB applied credit ceilings. However, their role in limiting credit to the nongovernment sector was significantly reduced due to expanded open market operations and BNB more efficient control of reserve money. As a result, credit ceilings were no longer employed after June 1994.

## **Interrelations between Commercial Banks**

### **Credit Resources in the Interbank Market**

By the end of 1994, the interbank market proved to be the most developed sector of the money market, providing adequate resources to commercial banks. As of 31 December 1994, the debt of BGL 61,905 million on disbursed interbank deposits doubled the amount of resources extended by the BNB to commercial banks. The debt on resources extended by the SSB totaled BGL 44,515 million, the largest share (71.9%) of the total debt. In addition to open market operations, the interbank market, providing opportunities for short- and long-term transactions, proved to be one of the most flexible and prospective tools to ensure and regulate liquidity on a daily basis. The increased share of resources extended for a term of up to one

week, reaching 49.7% at year-end versus 19.9% in 1993 and 12.2% in 1992 is evident. In 1994, the share of resources extended for a term of over 1 month tended to increase, to 9.6% compared with 7.5% in 1993.

In 1994, the interbank market experienced an essential change. Unlike previous years when exchanged resources between banks were mostly unsecured, by the end of 1994 over 50% of the resources were extended against collateralized government securities or other pledge. Banks with liquidity shortfalls, due to a great number of bonds issued under the LSNC, were isolated from the interbank market. Resources to maintain the liquidity of these banks were provided by the SSB and BNB, which significantly increased their debt to both institutions.

### **Interest Rate in the Interbank Market**

The average interest rate on credit resources placed through the interbank market was 67.5%, i.e. 3.7 percentage points over the average basic interest rate of 63.8%. This is indicative of the restrictive character of BNB monetary policy.

The analysis of the interbank market interest rate indicated an increase in the cost of lev resources, with a spread over the basic interest rate ranging from 1.2 percentage point in January to 3.1 percentage points at year-end. The high spread was prompted by increased demand for resources over supply due to reduced banks' liquidity, a result of the BNB restrictive monetary policy pursued.

## **5. Interest Rates on Commercial Bank Operations**

During 1994, commercial bank lending and deposit rates were strongly dependent upon the basic interest rate set by the BNB. In contrast to the previous year, BNB interest rate policy in 1994 was consistently restrictive, which reflected a general upward trend in nominal lending and deposit rates. The basic interest rate was raised three times (20 percentage points) over 1994, reaching the highest-ever level of 72% simple annual rate. Consequently, deposit and lending interest rates reached record nominal highs as well, but the high inflation rate changed them significantly in real terms.

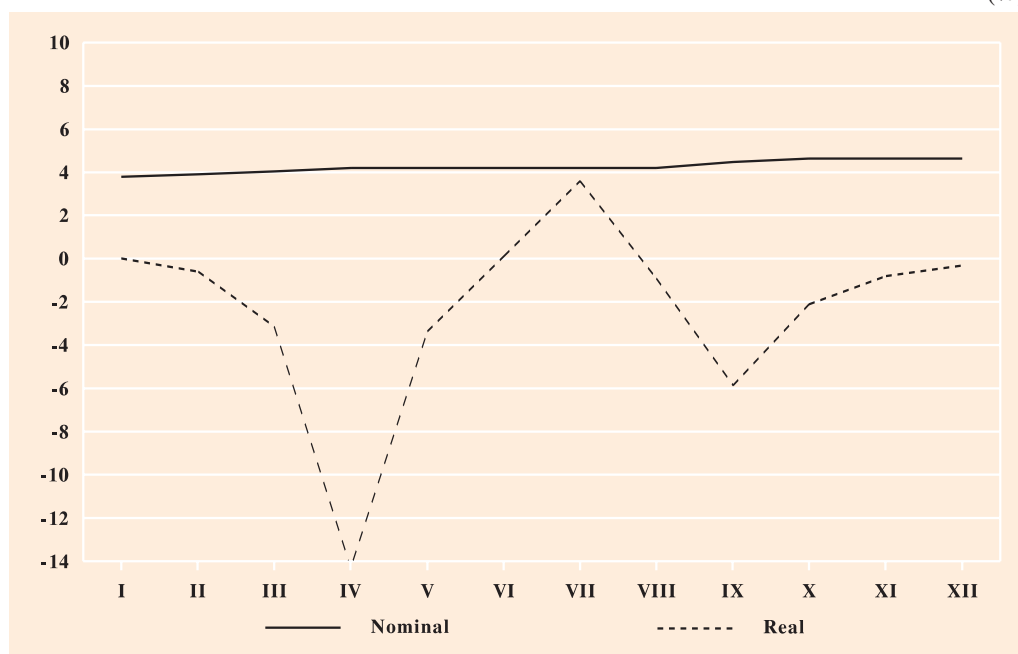
### **Deposit Rates**

Average monthly interest rates on demand deposits increased from 3.64% in December 1993 to 4.64% in 1994. The nominal annual growth in deposit interest rates lagged behind the basic interest rate growth by 8 percentage points. This signals that savers experienced substantial losses. The real interest rates on deposits deflated by the consumer price index were negative: -25.7% per annum and -20.4% in the first half-year. Compared with 1993, savers' losses increasingly grew, over 2.5 times in the first half-year and 3.5 times per annum. There are grounds to assume that in April the acceptable threshold was passed over. As a result, a foreign exchange substitution by all economic agents was observed in most months of the year. July and August were the only months characterized by positive interest rates, but savers' earnings stood below 4%. In the remaining months real interest rates, remained negative. Despite the increased basic interest rate, deposit rates in April and September reached the lows of -14.4% and -5.9% respectively. Similar trends in deposit rates were registered in 1993 as well, though fluctuations were smoother. Comparisons of data from 1993 and 1994 proved that the interest rate policy is an insufficient instrument to protect the deposit base. Confidence in the lev may be restored only through a consistent and coordinated economic policy directed to subdue inflation.



**MONTHLY INTEREST RATES ON ONE-MONTH DEPOSITS IN 1994**

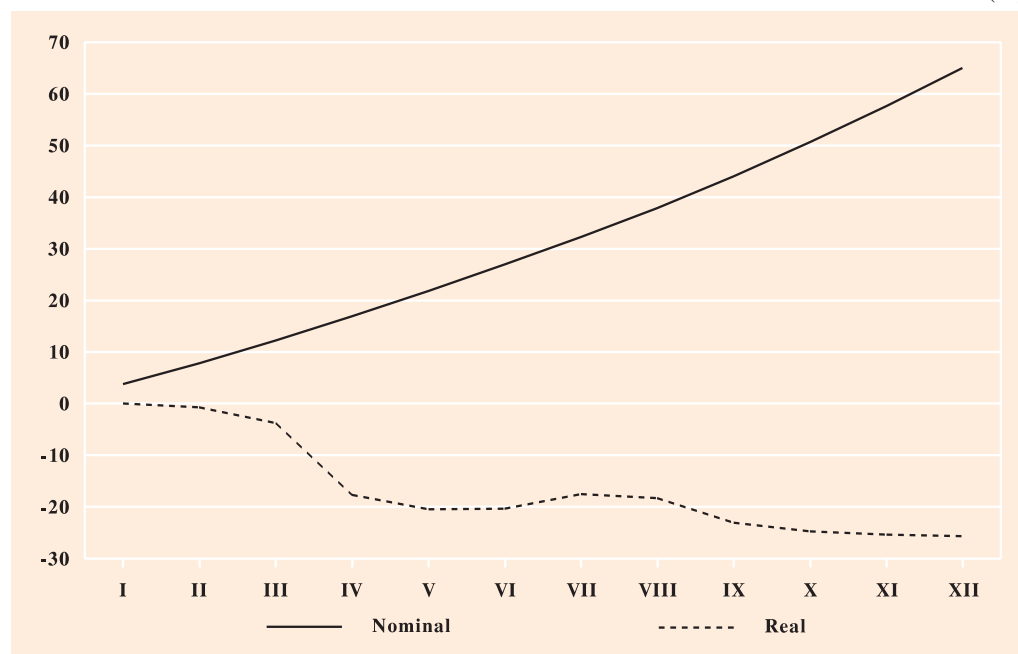
(%)



Source: BNB.

**INTEREST RATES ON ONE-MONTH DEPOSITS IN 1994  
(cumulative as of January 1994)**

(%)



Source: BNB.

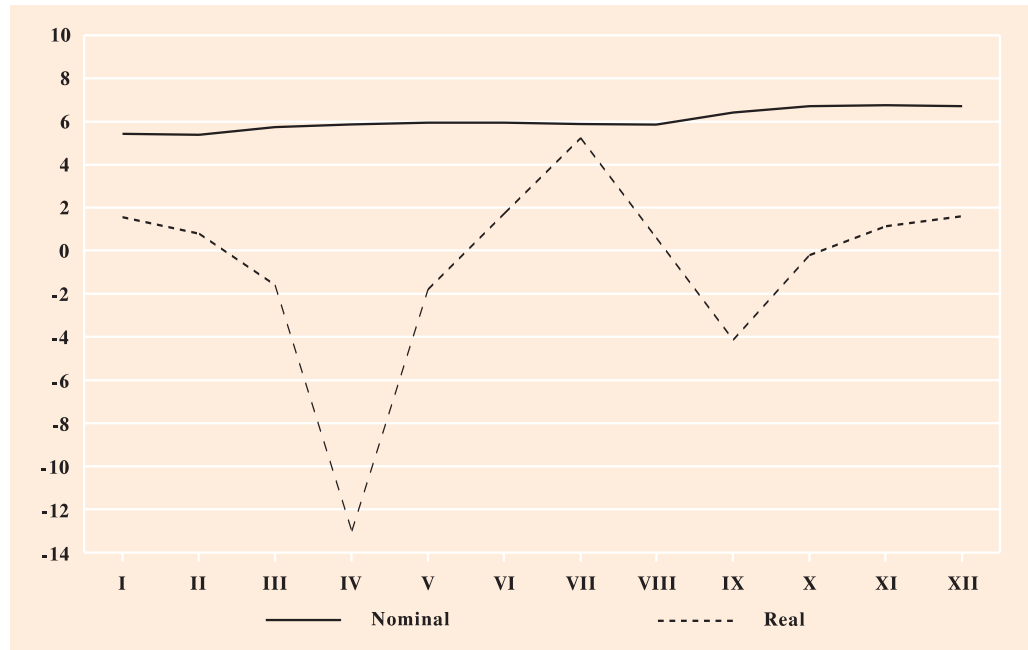
**Lending Rates**

Similar changes occurred in the interest rates on short-term credits. During the year, monthly values increased 1.5 percentage points, reaching 6.7% in December. In annual terms, interest rates on short-term credits stood a mere 2 percentage points below the basic interest rate which signals no essential changes in the position of borrowers. In contrast to deposit rates, nominal lending rates fell in four months, with the general upward trend following the basic interest rate growth. Real lending rates were positive in the first quarter of 1994, while in the second quarter the cost of credit reached its low (-14.5%). In the second half-year the positive value was

restored to 5.9%. The accumulated real cost of credit over 1994 remained negative (-8.9%), i.e. approximately 18 percentage points below the last year's level. The cost of credit, deflated by producer price index, increased but remained slightly negative for the whole of 1994. Aforementioned data suggests that the real cost of credit, irrespective of the high nominal values, did not have a repressive effect on the real sector.

**MONTHLY INTEREST RATES ON SHORT-TERM CREDITS IN 1994**

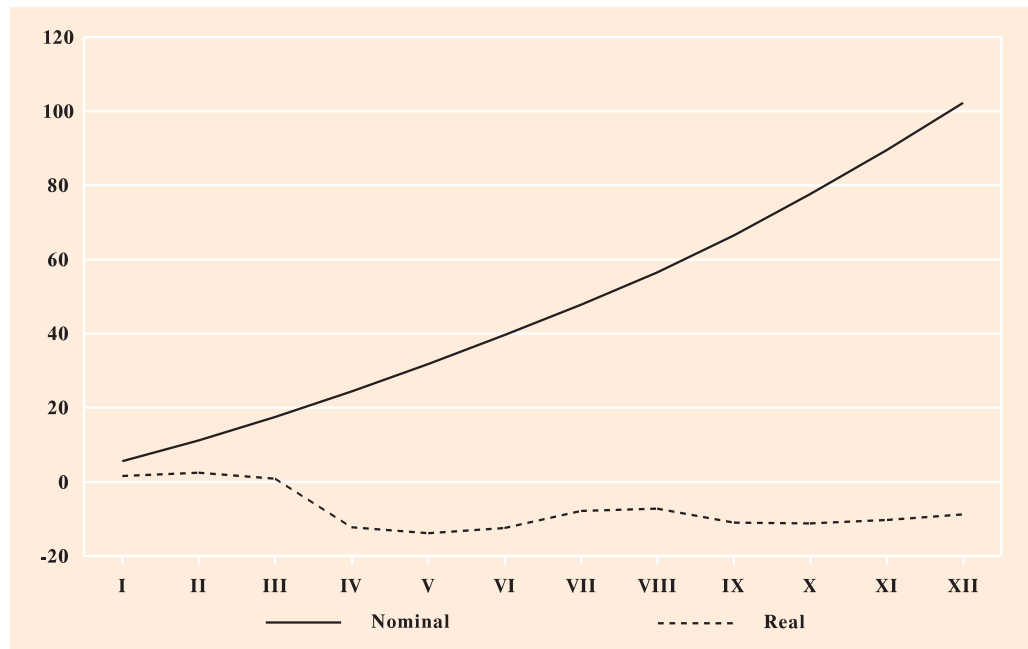
(%)



Source: BNB.

**INTEREST RATES ON SHORT-TERM CREDITS IN 1994  
(cumulative as of January 1994)**

(%)



Source: BNB.

## **Interest Rate Differential**

The interest rate differential for commercial bank loans and deposits continued to increase over 1994, reaching 2.1 percentage points in November (slightly decreasing in December). This trend reveals an erosion in the banking sector's stability; commercial banks increased the interest rate differential in an effort to help offset losses from new bad loans and low-yield government bonds issued under the LSNC. In this setting, both newly emerging and inherited problems in the banking system put banks' customers under additional pressure, prompting an increase in nonperforming loans and erosion in the deposit base.

## **6. Issuing Activities**

### **Volume of Issues**

By the end of 1994, currency outside BNB vaults (currency in circulation and currency in commercial bank vaults) totaled BGL 43.1 billion, an increase of BGL 14.7 billion, or 51.8% compared with 1993. The increase of currency outside BNB vaults was more than 20 percentage points less than broad money growth (a similar tendency was evident in 1993, too).

The share of currency outside BNB vaults in the total money supply fell from 11.7% at 1993 year-end to 10.3% at 1994 year-end. The currency supply remained within normal limits because no significant changes occurred in those factors which have a direct or indirect influence on its amount: moderately high inflation, nominal income growth, peculiarities in the country's payments system, indebtedness of companies, an underdeveloped money market, etc.

An analysis of the dynamics of currency outside BNB vaults indicates a typical decline from the end of 1993 through the first two months of 1994. In March however, the indicator rose dramatically, reaching BGL 30.6 billion. Compared to 1993, an increase of BGL 2.2 billion (7.6%) was registered. In March alone this was BGL 3.9 billion, an increase of 14.5%. The high growth rate of currency outside BNB vaults in March was due in part to increased incomes of individuals, mainly pensioners, and partly to the rise in cash holdings of individuals for the purchase of goods and payment of services, resulting from increased inflationary expectations, the devaluation of the lev in the forex market and the introduction of the VAT on 1 April 1994. In the ensuing three months the growth in currency outside BNB vaults was BGL 2.7 billion (8.5%), or BGL 1.2 billion less than in March. During the third quarter of 1994, currency outside BNB vaults continued to rise, increasing by BGL 3.5 billion (10.5%) at end-September versus June. Over the last quarter of 1994, currency outside BNB vaults displayed movement typical for this period. In October and November, currency outside BNB vaults increased by BGL 1,055 million, or 2.9%, while in December an increase of BGL 5,207 million (13.7%) occurred.

Growth in currency outside BNB vaults in December was due to increased money demand by individuals for Christmas and New Year spending, payment of extra remunerations, a rise in incomes of the population and relating advance wage payments, and increased cash holdings in commercial bank vaults. The rise in incomes of the population was consistent with CM Decree No. 268 of 16 November 1994 on setting the country's minimum wage and compensation of some incomes of the population during the fourth quarter of 1994, Decree No. 272 of 17 November 1994, amending and supplementing CM Decree No. 30 of 1994 on wages in the budget organizations and their adjustment for 1994 inflation.

Currency in the vaults of commercial banks, following a decrease of BGL 0.3 billion at the end of 1994 half-year from 1993 year-end (BGL 3.3 billion), rose significantly by end-December, reaching BGL 4.7 billion, an increase of BGL 1.5 billion, or 42.4%. Enhanced cash liquidity of commercial banks at 1994 year-end was due to expected withdrawal of funds by individuals for the Christmas holidays, the long distances money had to travel between commercial bank branches and BNB branches, technological peculiarities of processing money and inconveniences regarding its immediate deposit in BNB branches. Another factor behind this growth was probably the BNB Board Resolution of 16 June 1994 on holding required minimum noninterest-bearing reserves in levs in commercial banks, which was set at

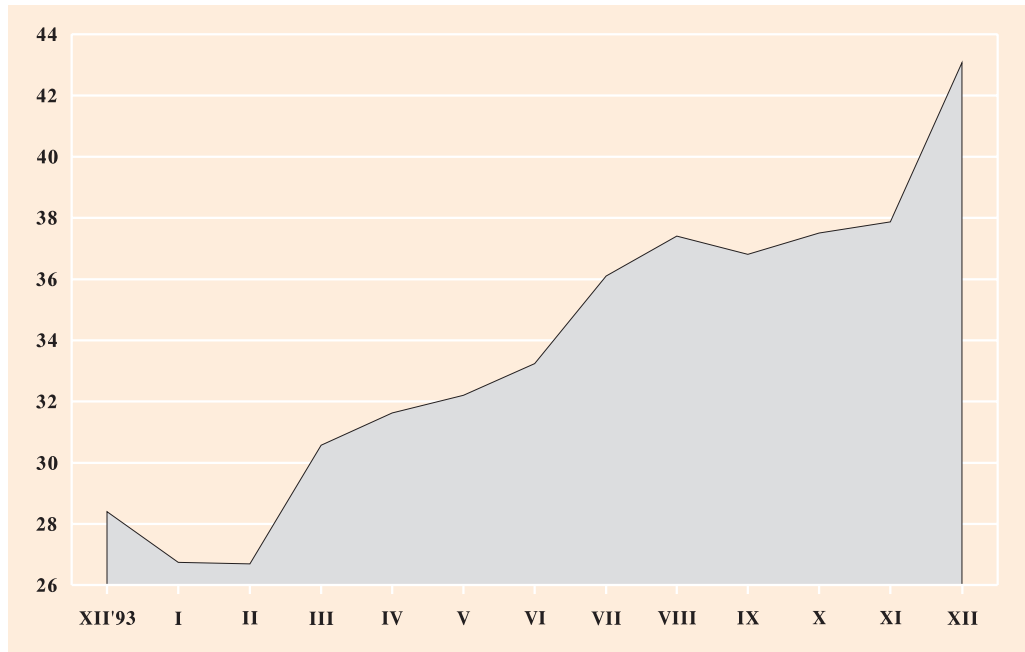
60% of all cash holdings in December.

## Denomination Composition

Changes occurred in the denomination composition of currency issues in 1994 from one year ago. Banknotes of higher denomination (BGL 100, 200, 500, 1,000 and 2,000) proved to be a more convenient form of currency. At 1994 year-end, high denomination banknotes accounted for 87.5% of the total value of denominations, against 74.6% at 1993 year-end. At the same time, the share of banknotes in these denominations in the total amount of banknotes comprised 30.9% at the end of 1994, against 19.6% one year earlier.

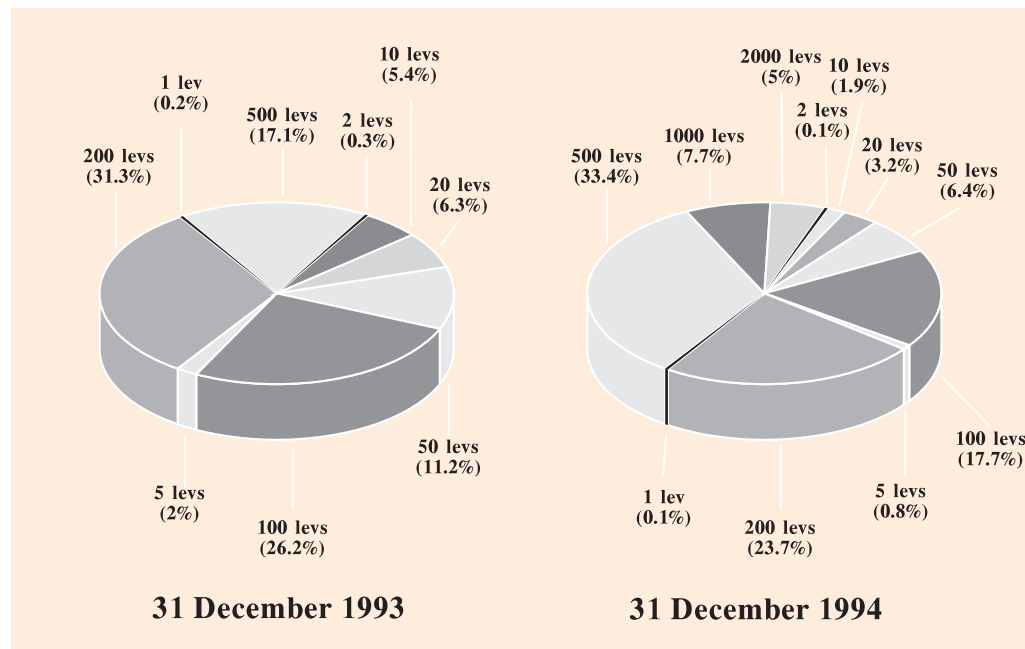
### CURRENCY OUTSIDE BNB VAULTS IN 1994

(billion BGL)



Source: BNB.

### DENOMINATION COMPOSITION OF THE BANKNOTE ISSUE\*



\* The relative share of denominations is based on values.

Source: BNB.

In compliance with BNB Board resolutions, the central bank continued to gradually withdraw old-design banknotes after normal wear. In this regard and with the goals of improving denomination composition of banknotes in circulation, creating better conditions for the service of bank customers, and maintaining clear money circulation, the BNB paid with newly-issued banknotes. Lower-denomination banknotes were replaced by coins of 1992 issue. The banknotes of BGL 1, 2, 5 and 10 (1962 and 1974 issues) will continue to be legal tender until 31 December 1996. Consequently, in 1995 they will be withdrawn from circulation after normal wear.

The average banknote in circulation by the end of 1994 had a face value of BGL 76 versus BGL 42 at 1993 year-end. The increase in the face value of the average banknote was the result of the higher denominations in circulation as well as of a decrease in the number of banknotes in circulation over 1994. Compared with 1993 year-end, the number of banknotes in circulation during the reporting period fell by approximately BGL 104 million with the withdrawal of worn lower-denomination banknotes.

In 1994, issuing activity was carried out in an inflationary environment. To meet future cash circulation needs, on 1 November 1994 the BNB put into circulation a banknote of BGL 1,000 face value, and on 21 December a banknote of BGL 2,000 face value. This helped to improve money circulation and reduced its cost.

## Coin Issues

In 1994, the BNB continued to issue commemorative coins in compliance with the established practice. In accordance with BNB Board Resolution No. 184 of 2 June 1994, the central bank put into circulation on 3 June 1994 a silver coin, with a face value of BGL 500, commemorating the 15th World Cup, USA '94. Pursuant to BNB Board Resolution No. 258 of 17 August 1994, the BNB put into circulation on 1 September 1994 a gold coin "St. Alexander Nevski Cathedral," with a face value of BGL 10,000. By BNB Board Resolution No. 330 of 27 September 1994, the BNB put into circulation a copper-nickel coin, with a face value of BGL 50, commemorating 100 years of the first athletic club in Bulgaria. In accordance with BNB Board Resolution No. 295 of 29 September 1994, the BNB began working on the projects and mintage of four commemorative coins, issue 1995, celebrating Bulgaria's association within the European Community, 100 years of Olympic games, 110 years of Bulgaria's Unification and 50 years since the establishment of the UN FAO.

In compliance with BNB Board Resolution No. 168 of 27 May 1993, commemorative coins of base and precious metals, issues 1962 – 1985, were withdrawn from circulation on 1 January 1995.

## Precious Metals

Pursuant to BNB Board Resolution No. 144 of 21 April 1994, BNB gold reserves increased from 1,017,041 troy ounces to 1,031,222 troy ounces. This increase was a result of inclusion of the assayed portion of circulated gold to meet the stock market standard. Over the reporting period, the increase in BNB circulating gold in the Main Depository continued. As in the previous two years, growth in gold reserves was affected chiefly through purchases of bullion from domestic producers as well as coin from individuals. At 1994 year-end, circulating silver in the Main Depository of the BNB decreased compared to 1993 due to the conclusion of domestic and foreign transactions.

### PRECIOUS METAL STOCK IN THE BNB

(in troy ounces)<sup>1</sup>

Indicators	31 December 1993	31 December 1994
Gold reserves of the BNB <sup>2</sup>	1,017,041	1,031,222
Circulating precious metals <sup>3</sup>		
Gold	21,277	41,160
Silver	843,221	617,589
Platinum	4,726	5,351

<sup>1</sup> One troy ounce is equal to 31.10348 g.

<sup>2</sup> The gold reserves are in bullions, stock market standard.

<sup>3</sup> The circulating precious metals include gold, silver and platinum of standard type (bullion, strip and officially minted coins).

Source: BNB.

Platinum increased due to purchases from domestic producers. In 1994, the tendency of sales to domestic producers continued to be negligible, due to the shrinkage of precious metal production.

## 7. Foreign Exchange Policy

In 1994, BNB foreign exchange policy, an integral part of its monetary policy, was directed at maintaining external stability of the lev. In contrast to previous years, when lev devaluation lagged far behind the inflation rate in the country, in 1994 for the first time after the liberalization of the exchange rate external and internal movements in the lev were strongly interdependent, thus increasing the significance of the foreign exchange policy in the monetary policy.

Throughout 1994, the foreign exchange policy was conducted under complex external and internal conditions. Foreign exchange policy implementation faced additional challenges relating to the National Assembly resolution requiring a portion of reserves to be retained in order to make payments on the foreign debt agreement and the commitments under the gentlemen's agreement with the major participants in the forex market prior to the adoption of the 1994 SBL. Volatile environmental factors predetermined uneven developments in supply of foreign exchange in 1994. At the same time, the shaken confidence in the lev in January and particularly in March, coupled with seasonal factors, significantly increased demand for foreign currency. Control over foreign exchange reserves of the country was aimed at providing funds to make payments on the foreign debt agreement, which in turn prevented massive BNB interventions in the forex market. As a result, at the end of March the BNB significantly deviated (though for a short time) from its main goal of a gradual change in the exchange rate. Later, due to restored foreign funding, the forex market was curbed but expectations for a new sharp devaluation of the lev in the summer endured. Only in the fourth quarter of 1994 did the BNB manage to buy perceptible amounts of foreign exchange, avoiding sharp changes in the exchange rate. The BNB replenished the country's forex reserves, necessary for the pending payments on the foreign debt agreement in 1995. After the third quarter of 1994, IMF funding was discontinued due to noncompliance with performance criteria, which again reduced foreign exchange inflows to the amount of receipts on the balance of payments current and capital accounts.

Dramatic changes in the exchange rate throughout 1994 clearly revealed the problems in the foreign exchange policy pursued under imbalanced demand and supply and reduced foreign financing. Challenges in the foreign exchange policy substantially limited the opportunities to conduct a consistent anti-inflationary monetary policy and posed the question of a closer coordination between monetary policy goals and instruments, in order to maintain the external and internal stability of the lev.

### **Forex Market**

The volume of spot operations effected by the central bank and fully licensed commercial banks amounted to USD 3.4 billion in purchases and USD 3.5 billion in sales. No significant changes occurred in the volume of forex market versus 1993.

The distribution of market agents covered by BNB foreign exchange statistics changed: the group of fully licensed banks includes banks submitting information about daily central exchange rate fixing, while the financial houses, classified as partners in the submitted information, joined the group of customers, including firms, budget-supported organizations and banks with domestic licence. Comparisons of data from 1993 and 1994 indicated a significant decline in the volume of the interbank market and an increase in operations with customers, including customers' foreign exchange with the BNB. This reveals indirectly that financial houses acquired a greater importance in the interbank market. Their classification as customers is conditional, since both financial houses and domestically licensed commercial banks act as intermediaries not only of firms but of forex market partici-

pants as well, although they were registered as final counterparties in transactions. To this end, the volume of operations with customers both in purchases and sales reflected, to some extent, repurchases in the interbank market.

#### FOREIGN EXCHANGE SPOT MARKET IN 1994

(million USD)

Volume	A. Bought	B. Sold	C. Balance
1. BNB with customers	266.7	284.0	-17.3
2. Fully licensed commercial banks with customers	2,270.0	2,312.9	-42.9
3. Interbank, fully licensed commercial banks only	443.4	488.8	.*
4. Interbank, BNB included (3+6A)	619.3	664.7	.*
5. BNB total (1+6)	442.6	527.6	-85.0
6. BNB with fully licensed commercial banks	175.9	243.6	-67.7
7. Intercompany**	16.2	16.2	-
8. Total with customers (1+2+7)	2,552.9	2,613.1	-60.2

\* Some imperfections in reporting lead to a minimum difference between purchases and sales which are identical in the interbank market.

\*\* The data is for the minimum volume of the market as currently monitored.

Source: BNB.

Foreign exchange was supplied mainly by ferrous and nonferrous metallurgy, metal-processing industry, light and heavy chemical industry, transport machine building, construction, wood and woodworking, glass, clothing and footwear industries, remedial enterprises, seaports and airports, automobile, sea and air transport, resorts, hotels, shipping agents, universities, traders of second-hand materials, cooperative trade, etc.

Foreign exchange was bought primarily by oil-processing enterprises, the energy sector, importers of energy input, sugar, automobiles, electronic goods, forage, as well as by the communications and printing industry, electronic and mass media, bottling works, producers of food-processing equipment, hospitals, exhibitions, government agencies, municipalities, foreign embassies, insurance companies, etc. Foreign exchange was supplied and demanded by the food and consumer goods trade, tobacco industry, foreign trade companies, etc. Branches and representatives of international companies participated in the market both as buyers (electronics and retail trade) and sellers (petrol companies) of foreign exchange.

#### SHARE OF INTERBANK OPERATIONS AND BNB NET OPERATIONS IN THE FOREIGN EXCHANGE MARKET

(%)

Interbank turnover / forex bought from customers (commercial banks)	21.5
Interbank turnover / forex sold to customers (commercial banks)	21.1
Interbank turnover / forex bought from customers (commercial banks and BNB)	26.2
Interbank turnover / forex sold to customers (commercial banks and BNB)	25.6
Net BNB sales / total sales to customers	3.3
Net BNB sales / balance of banks with customers	141.2

Source: BNB.

Several changes occurred in the interbank market: the importance of some of most influential banks in recent years diminished due to liquidity shortfalls, while the role of several new banks and foreign exchange intermediaries, used also in BNB interventions, was enhanced. Foreign banks, licensed to operate in Bulgaria, were among regular participants in the interbank market. (Since branches of foreign banks in Bulgaria are not included in the group of fully licensed banks submitting information about central exchange rate fixing, the volume of operations of these branches are included in the group of customers and are classified as counterparties of fully licensed banks.)

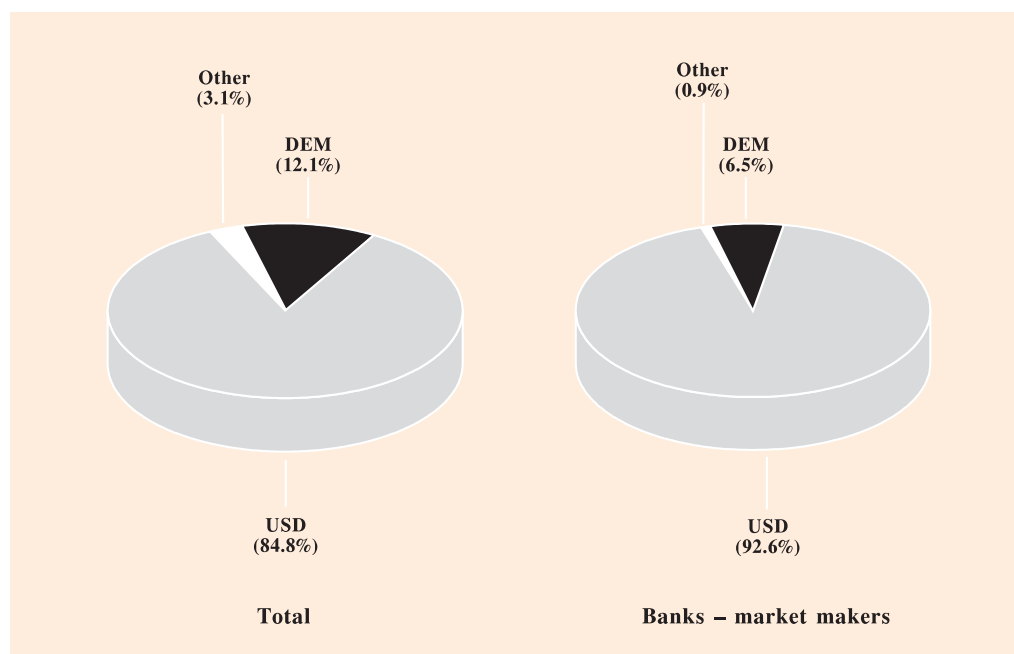
BNB foreign exchange purchases totaled USD 422.6 million, USD 439.4 million (99.3%) from banks and other financial institutions and USD 3.2 million (0.7%) from companies. BNB foreign exchange sales amounted to USD 527.6 million. Of these USD 282.4 million (53.5%) was sold to banks and other financial institutions, USD 128.2 million (24.3%) to companies, (including USD 9.8 million,



or 1.9% to the State Fund for Reconstruction and Development), USD 77.4 million (14.7%) to the Ministry of Finance to make payments on the foreign debt of the country, and USD 39.6 million (7.5%) to budget supported organizations. The BNB's largest sales of foreign exchange pertained to the country's foreign debt: interest payment of USD 25 million to London Club creditors and USD 0.1 million to the World Bank in March, and USD 38.8 million and GBP 0.2 million to the World Bank in July.

Intercorporate operations were of normal character but their volume in the intercorporate market decreased more than threefold compared with 1993. The rate of decrease in the volume of intercorporate operations in the second half-year relative to the first half-year almost repeated 1993 rates. In general, the average value of one transaction was below USD 100,000, largely even below USD 50,000. Intercorporate market quotations were mostly pegged to the central exchange rate. Sometimes, bid, offer or average quotations of the servicing commercial bank were used. Parties in intercorporate operations were financial houses, industrial enterprises (in the field of machine building, metal processing, woodworking, pharmaceuticals, synthetic fibres, textile, food), agricultural enterprises, energy input traders, foreign trade companies, sole proprietors, air traffic, service companies, sport and trade union organizations, etc. Representatives of international companies participated both in the interbank and corporate markets.

#### STRUCTURE OF THE FOREIGN EXCHANGE MARKET IN 1994

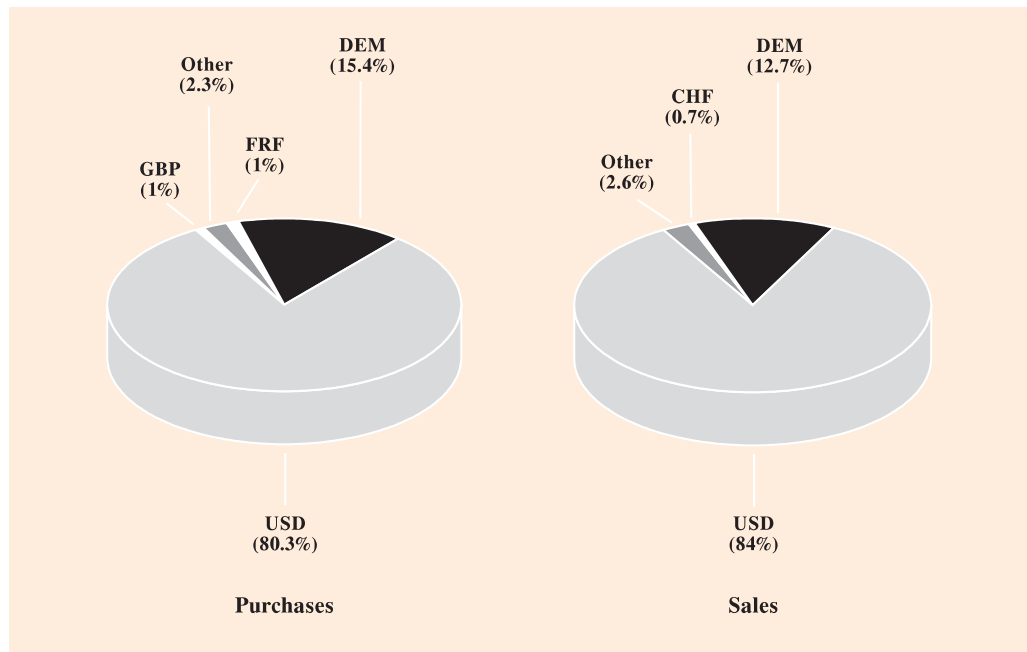


Source: BNB.

Comparing currency structure of the forex market across individual sectors with that in the previous year may not be very precise, due to the new classification of the market by group. Shares of the two major currencies, the US dollar and the Deutschemerk, in the currency structure of the forex market are nearly identical with those in 1993. An analysis and comparison between the various market sectors during the reporting period indicates that the US dollar had the largest share in interbank operations and a bigger share in sales to customers than in purchases from them, which was typical for the previous two years. The increased share of the US dollar in interbank operations builds on the leading role of the US dollar in speculative operations and central bank interventions, while bigger sales of the US dollar to customers are attributable to sales for external debt payment, imports of energy resources, the opportunity for some financial enterprises to hold US dollars (with the exception of banks with full licence which are reported as interbank market), etc.



**PURCHASES FROM AND SALES TO CUSTOMERS IN 1994**



Source: BNB.

**Exchange Rate**

The exchange rate curve of the US dollar, the most traded in the domestic market currency, used as a benchmark in interbank foreign currency transactions, displayed a sustained seasonal pattern of movement: a weak lev in the winter, strengthening in late spring; a strong lev in the summer, weakening in the winter. The curve, however, is broken, reflecting the March crisis, then the curve of the US dollar moves further at a new level. The whole picture of the 1994 curve reveals a stronger trend of devaluation of the lev than in previous years.

**CENTRAL EXCHANGE RATE IN 1994**

(BGL/USD)



Source: BNB.

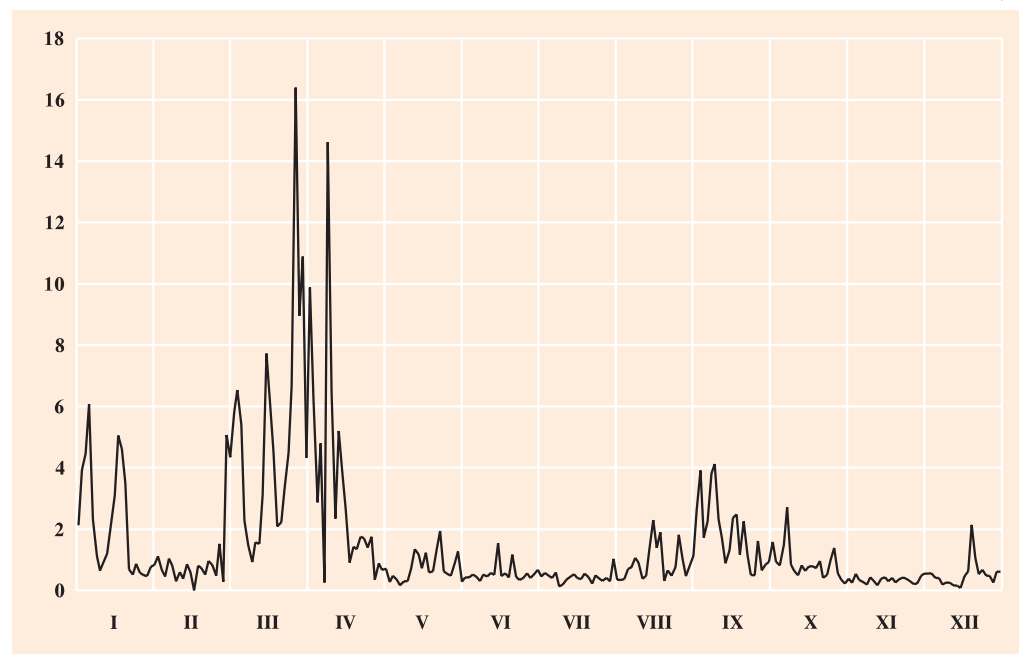
The lowest USD/BGL central exchange rate occurred on the first business day, 3 January, at BGL 32.755 per 1 USD. During the critical period at the end of March, sales to customers surpassed BGL 70 per 1 USD, interbank trading approached this level with the central exchange rate reaching BGL 64.942 per 1 USD on 30 March. The lowest central exchange rate during the adjustment stage was BGL 51.057 per 1 USD on 5 April; the opposite adjustment emerged at BGL 57.244 per 1 USD on 27 April; the lowest exchange rate in the summer was BGL 53.237 per 1 USD on 1 August; the highest exchange rate in the autumn was BGL 65.527 per 1 USD on 24 October; the highest exchange rate at year-end stood at BGL 66.269 per 1 USD on 23 December, and the exchange rate on 30 December was set at BGL 66.015 per 1 USD.

Demand for US dollars necessary for making payments to internal forex creditors (at the end of April this reinforced the general trend, but at the beginning of May turned against it) affected the exchange rate curve. Settling payments with foreign creditors (in April, October and December in line with general needs for foreign exchange, which were partly satisfied by BNB reserves and receipt of forex from BNB interventions) had an additional impact on the exchange rate curve. The attempt to destabilize the lev at the end of December was reinforced by rumors of a block of the foreign exchange deposits, which led to enhanced demand for foreign currency, particularly Deutschemarks, to make payments on funds drawn.

The average volatility of the BGL/USD exchange rate throughout 1994<sup>29</sup> accounted for 1.48%; it was 2.17% in the first half of 1994 (a monthly high of 5.06% was in March, and monthly low of 0.58% in June); and 0.82% in the second half of the year (a monthly high of 1.83% in September, and monthly low of 0.34% in November). Volatility hit record high of 16.42% on 29 March.

#### VOLATILITY OF THE BGL/USD EXCHANGE RATE IN 1994

(%)



Source: BNB.

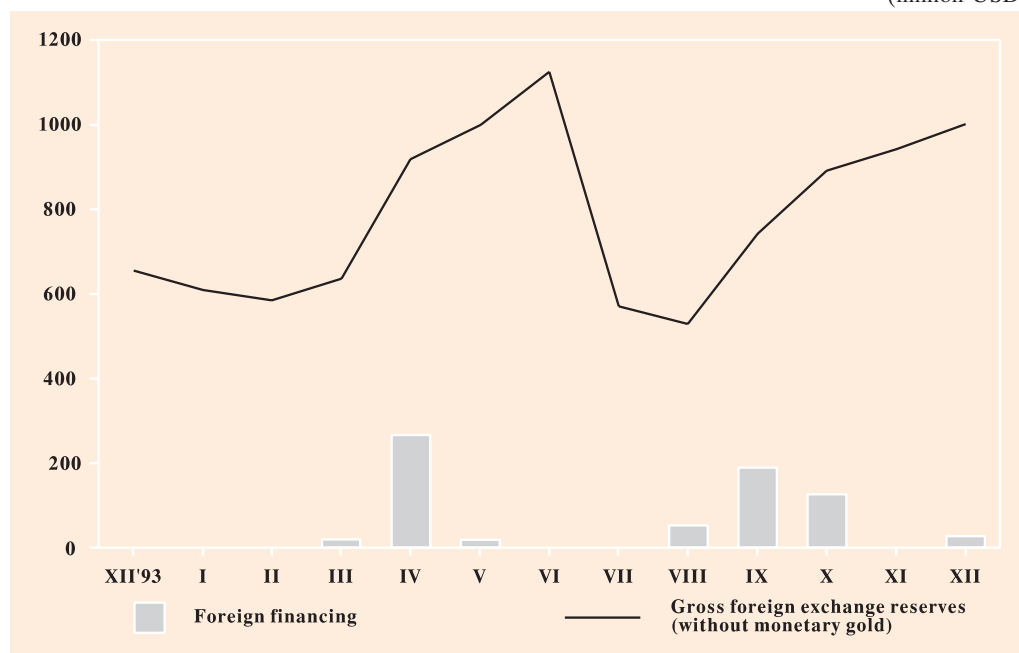
<sup>29</sup> The average volatility is obtained as the arithmetic mean of three absolute values: the difference between the highest and lowest exchange rates applied by fully licensed banks in their interbank transactions and those with brokers for a particular day; the difference between the highest exchange rate on interbank transactions for a particular day and the daily central exchange rate; and the difference between the lowest exchange rate on interbank transactions for a particular day and the daily central exchange rate. The lev value is converted into US dollars by dividing it to the central exchange rate for the respective day. The dollar value, converted into cents, is the percentage of daily rate volatility. The respective periods are obtained as the arithmetic mean of daily volatility.

The spread between offer and bid rates reflected the state of the forex market. The interbank spread accounted for approximately BGL 0.10 in a calm market; spread on quotations for customers and exchange bureaus moved within BGL 0.40 – 0.50 in early 1994, and within BGL 0.40 – 0.60 at year-end. Where the market was volatile, the spread on interbank quotations moved within BGL 0.20 – 0.30; on quotations for customers and exchange bureaus, around BGL 1. Where disruptions in the market occurred, the spread in the interbank market and on quotations for customers reached BGL 5 – 7, and in exchange bureaus, BGL 10 – 13. Contrary to long-term expectations of banks and companies for a lev devaluation and competition among distributors and resalers of foreign exchange (e.g., in October – December) the spread on the quotations for customers was wider than that in the exchange bureaus. Conversely, with an increased speculation, when pressure on the internal purchasing power of the lev was exerted (for example, in spring and at year-end) the spread on exchange bureaus' quotations was wider than that on quotations for customers.

As forex sales prevailed with the fall in the US dollar in early 1994, and forex purchases dominated with the strengthening of the US dollar at year-end, an average exchange rate of BGL 58.419 per 1 USD was formed from BNB forex purchases in the forex spot market, and an average exchange rate of BGL 52.258 per 1 USD emerged from BNB forex sales in the same market. The average annual nonweighted central exchange rate was BGL 54.247 per 1 USD, and the average weighted rate from spot market operations, BGL 55.184 per 1 USD. BNB average exchange rate on purchases was 7.7% higher, and that on sales was 3.7% lower than the average central exchange rate. Consequently, a negative exchange rate differential of approximately BGL 2.5 billion emerged. The average rate of BNB purchases was 5.9% higher, and that on sales was 5.3% lower than the average weighted exchange rate of spot transactions, with a negative exchange rate differential being formed again at approximately BGL 2.5 billion.

#### GROSS FOREIGN EXCHANGE RESERVES AND FOREIGN FINANCING IN 1994

(million USD)



Source: BNB.

## **Foreign Exchange Reserves**

At 1994 year-end, BNB gross foreign exchange reserves<sup>30</sup> rose USD 346.5 million, or 52.9% versus 1993. This favorable tendency was in contrast to the serious drop in reserves in 1993 versus end-1992 (USD 246.7 million, or 27.4%).

Throughout the reporting period, gross foreign exchange reserves dynamics were broadly divergent. Several factors continued to be essential for the development of reserves: foreign financing; the country's external debt payments; and BNB net open market operations in the domestic forex market. At year-end, BNB gross foreign exchange reserves dropped below the December 1993 level (USD 655.3 million); in March more reserves were accumulated due to a loan extended by the Austrian government. Further increases followed as a result of loans extended by the IMF and the World Bank in April. A loan from Sweden in May and BNB purchases of foreign exchange in May and June are attributable to the highest level reached in reserves (USD 1,124.4 million) since the unilateral moratorium on the external debt payment was announced by the Bulgarian government in 1990. A dramatic fall in reserves occurred in July after a significant portion was set aside to meet external debt payments in the same month. In August, a loan from Japan was disbursed, but massive BNB interventions in the forex market prompted a further decline in reserves. Subsequent increases in reserves occurred with the receipt of funds from the IMF and the Japanese Export-Import Bank in September, from the World Bank in October, from forex purchases by the BNB in November and loans from the World Bank and the governments of Norway and Finland in December.

Gross foreign exchange reserves once again exhibited major dependence on foreign financing. The central bank's reserves in foreign debt servicing, whereby sizable amounts of dollar "instruments" were blocked, contributed to the increased share of dollar assets in reserves.

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<sup>30</sup> BNB gross foreign exchange reserves include BNB assets in foreign currency deposited in banks abroad, cash holdings in special drawing rights (SDR), and Bulgaria's reserve position with the IMF. If BNB gold reserve is added up, they total 1,031, 222 troy ounces as per BNB Board Resolution No. 144 of 21 April 1994. As a result, gold and forex reserve levels will be higher than those analyzed in the text, and will depend on the selected prices for the evaluation of gold in US dollars.

## **V. Bank Supervision**



In 1994, some draft amendments and improvements in the currently active banking supervision regulations were prepared. The amendments make the regulations more practical and provide for transitional periods. The recommendations of World Bank experts were taken into consideration. The discussion of the drafts by the Managing Board of the BNB and their publication in the State Gazette are pending.

### **Licences**

Since the beginning of the year, interest in the incorporation and licensing of new banks has increased considerably. Local and foreign shareholders, companies and foreign banks are among the applicants for banking licences.

The Managing Board of the BNB has granted permits for banking operations to nine new banks, of which five are for domestic and foreign transactions, four are for domestic transactions, and one is for a foreign bank branch. The newly licensed banks are: Corporate Commercial Bank Ltd., Sofia; "St. Nicholas" International Orthodox Bank Ltd., Sofia; Reiffaisen-Bulgaria Ltd., Sofia; BNP – Dresdnerbank Ltd., Sofia; Bulgarian Investment Bank Ltd., Sofia; Balkan Universal Bank Ltd., Elit Commercial Bank Ltd., Mollov Commercial Bank Ltd., Sofia; and the Sofia branch of ING-Bank, Netherlands.

A total of 531 nonbank financial institutions – financial houses, brokerages and exchange bureaus – were licensed in 1994. The number of nonbank financial institutions licensed has dropped considerably compared with 1993.

### **Off-site Inspection**

Meeting major off-site control objectives in the past period involved expanding the database for analyzing commercial banks' activities.

The main problems hampering proper banking supervision performance are, on the one hand, delays in the incoming information supplied by the country's large commercial banks with a more developed branch network, and, on the other hand, the poor quality of supplied information which necessitates certain corrections and clarifications. Existing difficulties notwithstanding, banking supervision covers all banks with verification and analysis of data contained in the banks' reports. Monitoring banks' activities allows for direct response to unfavorable trends occurring in their financial status.

Over the past period, particular attention was paid to discovering the causes for the permanent and continual deterioration of the financial status of two problem banks – Economic Bank and Mineralbank. Their major failings are insolvency and seriously impaired liquidity. Bank supervision revealed that their difficulties are to a great extent the result of both the unfavorable impact (low yield) of the LSNC bonds, and bad management. Following discussions on the two banks' rehabilitation programs and diagnosis of their real status, the two banks' activities were placed under a special supervision regime.

In 1994, experts from the off-site and on-site control divisions made joint inspections in 10 large commercial banks, with the purpose of verifying the return forms prepared by the banks as per Regulations No. 8 on the capital adequacy of banks. Their findings helped in elucidating some issues not properly clarified in the instructions for preparation of the forms.

Additional information concerning attracted funds and off-balance sheet commitments was required from banks for a more profound analysis. Besides its use in the analysis, this information made a considerable number of banks, which did not account or accounted improperly their off-balance sheet commitments, introduce

more systematic accounting arrangements and account as off-balance sheet all their commitments. An analysis of commercial banks' fixed financial assets was made and the results thereof were made known to the respective bank managements.

The main findings and conclusions as to the performance under Regulations No. 7 on big and internal loans of banks, Regulations No. 8 on the capital adequacy of banks, and Regulations No. 9 on the loan classification and the formation of mandatory special reserves (statutory provisions) by banks are as follow<sup>31</sup>:

- The total balance sheet figure for all commercial banks is BGL 518 billion. In comparison to the accounting data as at 31 December 1993, this parameter features an 83.5% increase. Capital (equity and supplementary) makes up as little as 4% of balance sheet liabilities, the same as their relative share as of 31 December 1993. Banks' capital has increased by 41.7% as compared with 1993. Reserves form only 1.8%, while in 1993 they were 2.7%.

- The overall loss sustained by commercial banks has increased by 115% in comparison to 1993. There are two causes for this negative tendency – the increase of bad loans, and hence the drop in interest earnings, and LSNC bonds' low yield.

- Big loans exceed by 16 times the commercial banks' capital base – their maximum allowable excess under Article 28 of the LBCA is eight times. In 1993, the excess was 2.5 times. This indicates a tendency toward an increasing concentration of credit, and consequently increasing risk assumed by banks in extending big loans. The amount of big loans granted by banks has increased in comparison to 1993 by 239%.

**BIG LOANS**  
(under Regulations No. 7)

(thousand BGL)

Indicators	Big loans	Capital base	Excess
	1	2	1:2
Total for the banking system in 1993	31,921,118	30,617,627	1.04
Bulbank excluded	31,921,118	12,686,776	2.52
Total for the banking system in 1994	108,309,285	29,520,596	3.67
Bulbank excluded	108,309,285	6,708,268	16.15

Source: BNB.

- The general capital adequacy ratio is 3.12%, but because of methodological differences between nationally and internationally accepted accounting standards, this ratio does not adequately express the real capital adequacy of banks. The latter has been overestimated due to the fact that the capital base has not been reduced by the amount of unallocated provisions for covering bad loans.

- Classified loans make up 75.5% of all loans accounted for in the report forms under Regulations No. 9 (this ratio has remained unchanged since 1993). In structural terms, an increase of doubtful loans, group A, is seen as mainly resulting from the valuation adjustments of the exchange rate of the lev to the US dollar, as the banks' foreign exchange balances are included in this group; uncollectible loans have increased as well. With required statutory provisions for classified loans in the amount of BGL 71,080 million, only BGL 10,242 million has been allocated, which makes up 14.3% of the mandatory provisions and 5.4% of the amount of the loans. The provisions allocated in 1993 make up 17.4% of the reserve requirement and 6.5% of bad loans.

<sup>31</sup> As per summarized data based on preliminary commercial bank balance sheets and reports as of 31 December 1994 (Bulbank excluded). Much higher results reported by Bulbank and the essential changes compared with 1993, pertaining mainly to the written-off foreign debt in its balance sheet, led to unrealistic conclusions for the banking system as a whole.



## **On-site Inspections**

On-site inspections were an important contribution to the monitoring and analyses made by the off-site control experts. Extensive inspections of 7 commercial banks were made in 1994. In three of the consolidated banks, diagnostic audits were launched with PHARE financing. Groups of BNB banking supervision experts took part in them. With a view to assessing the processing technology and authenticity of the data supplied by the banks under the banking supervision regulations, 54 target examinations in various areas of banking activities were conducted. An additional 26 inspections of nonbank institutions were performed jointly with the Sofia Tax Directorate to verify compliance with the foreign exchange regime.

The checks and inspections targeted: establishing whether the banks' activities were in compliance with the provisions of the LBCA and the bank supervision regulations; assessment of lending operations in terms of internal regulation and the state of credit portfolios; and analysis of the overall current financial status of the inspected institutions.

Due to the continuing downswing in the country's economy, the instability of business relations and of debtors' financial standing, including so-called borrowers, commercial banks' credit portfolios were assessed as being composed of high-risk, low-quality claims. The overall balance sheet big loan exposure dominated the portfolios of many banks. This concentration of enormous credit risk in the banks' portfolios has a negative impact on their performance. A number of deficiencies in the organization and monitoring of loans exist.

The on-site inspections proved that many of the banks suffer from the following deficiencies:

- The credit committees' competence is to a great extent reduced in scope. In some banks the committees are superfluous, which is proven by cases in which the credit committee justifiably rejected an application for a loan, but in the long run the loan was permitted by the managing authority or the executive management.

- The internal rules are not always precise enough, particularly in terms of limits established for individual categories of clients. In some banks, transactions like direct loans, guarantees and discount operations are not treated in their integrity, which allows a particular operation to fall within the set limit, but if considered together with the other forms of lending and credit facilities, the credit exposure in relation to this client considerably exceeds the statutory limit (under the LBCA).

- There are many faults in terms of the documentation (credit files) kept in the banks. Typical cases are: missing minutes of credit committees meetings; some loan contracts, annexes, etc. do not contain all requisites or are missing altogether; part of the credit documentation is not sent to the credit offices, but rather remains with the banks' legal staff.

- There are instances, particularly in the newly incorporated banks, where credit inspectors do not render enough time to current monitoring and management of granted loans.

- Very often loans extended to economically related persons were not treated separately. The banks did not pay due attention to the fact that the insolvency of one person can have a negative impact on all others. There are considerable deficiencies in terms of guarantees mutually provided to the banks by such persons. Banks rarely assess the stability of guarantors' businesses.

- Some banks concentrate credit in one particular industry or economic group. Bank inspections revealed cases in which bank personnel cannot evaluate the risk of concentration in financing, the profitability and instability of the industry or the group.

- There are cases in which at the very moment a loan is granted it is obvious that it has the potential of not being properly serviced. Often there is a discrepancy between the purpose of the loan and its maturity, e.g., a short-term loan for investment purposes.



## **VI. Financial Results of BNB Activities**



The BNB annual balance sheet was done after closing of the state budget and conversion of foreign exchange assets and liabilities in levs at the exchange rate as of 31 December 1994.

The BNB's fixed capital of BGL 200 million, in compliance with Article 7 of the Law on the BNB, remained unchanged. The reserve fund, built up under Article 8 of the Law on the BNB, allowed massive interventions by BNB in the forex market during certain periods of time. The outstanding balance on the clearing agreement with Russia was repaid from the reserve fund, since the MF did not extend interest-bearing government securities to the BNB.

In 1994, the BNB lent long- and short-term credits to the MF, totaling BGL 15,700 million. The MF repaid a portion of the credits monthly, reducing by BGL 7,822 million its debt to the BNB. The direct debt of the MF was additionally decreased by BGL 1,237.5 million through securitization. As a result, the debt of the MF to the BNB as of 31 December 1994 totaled BGL 40,087 million.

Equity participation of Bulgaria in international financial institutions totaled BGL 12,074 million (with equal shares of the BNB and the MF in the IMF, the EBRD and the International Financial Corporation), as follows:

	(million BGL)
European Bank for Reconstruction and Development	1,335
International Monetary Fund	10,593
International Financial Corporation	118
National Numbering Agencies (ANNA) for Securities	1
Multilateral Agency for Investment Guarantees	26
TOTAL	12,074

The BNB equity in the Bank Consolidation Company and other companies totaled BGL 1,745,503,414, as follows:

	(BGL)
BIS, Basle, Switzerland	955,577
Bulstrad Ltd., Sofia	2,700,000
Borica Ltd., Sofia	145,000,000
Bankservice Ltd., Sofia	111,880,000
Mint Ltd., Sofia	14,528,000
International Banking Institute Ltd., Sofia	1,000,000
Bank Consolidation Company Ltd., Sofia	1,469,008,000
Other	431,837
TOTAL	1,745,503,414

The BNB fixed capital and shares are valued at nominal value. Money resources in levs are valued at their nominal value, and foreign exchange at the exchange rate as of 31 December 1994.

As a result, the BNB showed revenue of BGL 75,478,597,000 and expenditure of BGL 46,566,334,000. Annual surplus of revenue over expenditure of the BNB is as follows:

**BNB REVENUE AND EXPENDITURE IN 1994**

(thousand BGL)

I. BNB revenue	75,478,597
II. BNB expenditure	46,566,334
III. Balance (I – II)	28,912,263
Amount to be distributed	28,912,263
1. Reserve fund (25%)	7,228,066
2. Other special reserves (0.95%)	274,666
3. Social support fund (0.05%)	14,456
4. Balance to be paid in the budget	21,395,075
IV. Balance of revenue over expenditure as of	
31 December 1994 to be paid in the budget	20,257,737
V. Amount paid in the state budget by 20 January 1995	1,137,338

**Financial Revenue**

In 1994, interest revenue (55.1%) accounted for the largest portion of total revenue. Interest revenue of BGL 24,442,664,000 on short- and long-term loans drawn up by the MF had the largest share (58.8%), followed by interest revenue of BGL 15,253,271,000 on deposits extended to commercial banks (36.7%). Interest earnings of 4.5% (BGL 1,878,743,000) came from forex operations, and 0.07% from an advance transfer of minimum reserve requirements.

Revenue from operations in government securities accounted for 44.6% of total financial revenue.

Compared with 1993, the share of interest payments from the MF decreased in total revenue (58.8% in 1994 versus 69.9% in 1993), while the share of interest payments from commercial banks increased (36.7% in 1994 versus 23.9% in 1993). This is a result of forced BNB refinancing of commercial banks with liquidity shortfalls due to sizable amounts of bonds (issued under the LSNC) in commercial banks.

**Financial Expenditure**

The BNB's financial expenditure in 1994 includes interest payments, commissions, expenses on government securities operations, currency in circulation, labor and social securities, materials, overhauls, services and social activities.

The BNB's expenditure on interest payment totaled BGL 10,642,161,000, or 23.2% of total expenditure. Of this, BGL 685,690,000 (versus BGL 350 million in 1993) was paid on current accounts of the MF and BGL 3,523,118,000 on commercial bank current accounts.

Expenditure for BGL-denominated government securities operations totaled BGL 34,918,480,000 (versus BGL 525 million in 1993) and expenditure for government securities operations in foreign currency was BGL 8,400,000 (versus BGL 7 million in 1993).

Expenditure on currency circulation totaled BGL 370,734,000 versus BGL 225 million in 1993, an increase of BGL 145,734,000.

In 1994, expenditure for labor and social securities amounted to BGL 183,548,000 versus BGL 100 million in 1993. This growth was mainly a result of both the high inflation rate and the increased number of BNB branches and personnel, and the National Guard and Security Squad. Expenditure on labor and social securities accounted for 0.4% of total BNB expenditure and 24.75% of the current activity expenditure.

**Reserves**

From the annual surplus of revenue over expenditure, the BNB has allocated resources to the Reserve Fund totaling BGL 7,517,187,000 (26%).

The BNB paid into the state budget BGL 21,395,075,000. Of this, BGL 20,257,737,000 had been transferred by 31 December 1994, and BGL 1,137,338,000 was paid on 20 January 1995 by request of the MF.

**Budget of the BNB**

By resolution of the Plenary Council of the BNB, the 1994 budget of the BNB, in the amount of BGL 921,760,000 for support of current activity, and BGL 1,032,200,000 for investment in tangible and intangible long-term assets, was adopted.

The expenditure on BNB current activity in 1994 is as follows:

**PERFORMANCE OF THE 1994 BUDGET OF THE BNB**

Indicators	Budget (million BGL)	Performance (million BGL)	(%)
<b>Section I</b>			
Expenditure for support of BNB current activity	921.7	725.4	78.70
Expenditure for support of currency in circulation	416.6	370.7	88.98
Expenditure for labor and social securities	205.8	183.5	89.16
Expenditure for materials, services and overhauls	282.1	152.9	54.20
Expenditure for social activity in the BNB	17.2	18.2	105.81
<b>Section II</b>			
Investment in tangible and intangible long-term assets	1,032.2	820.0	79.44
Expenditure for acquisition of long-term assets	960.2	749.0	78.00

Source: BNB.

The 1994 investment program of the BNB included construction of a banknote and securities printing center at the BNB. Modern banknote counting equipment began operation in 1994. The BNB branch in the town of Haskovo opened in September 1994. Construction of the building for the BNB branch in the town in Russe is underway. Expenditures were made for the improvement of security, computerization, machines and equipment.

## Balance Sheet of the Bulgarian National Bank

	million BGL	
	1993	1994
<b>ASSETS</b>		
Holdings in Bulgarian coins	132	343
Holdings in foreign exchange	3	109
Participation in international institutions	2,380	12,075
Holdings in foreign securities	2,497	50,391
Deposits and loans extended to commercial banks	51,411	89,946
Loans extended to the government	33,447	40,087
Securities	3,636	14,767
Other assets	14,914	33,606
<b>Total</b>	108,420	241,324
<b>LIABILITIES</b>		
Statutory fund	200	200
Reserve and other funds	30,337	91,094
Banknotes in circulation	28,181	45,935
Current and deposit accounts	44,285	86,361
Other liabilities	5,417	17,734
<b>Total</b>	108,420	241,324



## **VII. Development of the Banking and Settlement System**



## 1. State of the Settlement System

### **Development of Infrastructure**

During the period under review, the number of settlement system inputs continued to increase, from 550 on 1 January 1994 to 746 on 31 December 1994. By the end of the reporting period there was one input for every 11,300 persons. According to this indicator, Bulgaria lagged far behind developed countries, where one input services 742 persons (Belgium) to 2,330 persons (USA).

During the period under review, 8,471,125 settlements of BGL 1,395 billion, or approximately BGL 5,492 billion a day, were cleared through BISERA – the system for electronic interbank transfer. Despite serious increases in settlement system inputs and in the number of interbank transactions, the expected growth in electronic transfers in lev terms is still limited. Whereas in 1993 the settlements made through BISERA exceeded threefold the gross national product, in 1994 this ratio fell to 2.5<sup>32</sup>. By way of comparison, according to data released by the Bank for International Settlements, Basle, this indicator moves within a range of 190 (Switzerland) to 10 (France).

### **BISERA and BANKNET**

It was decided that the existing BNB settlement system should be replaced by upgraded equipment. By the end of 1995, the old system will be transformed to a new hardware platform.

A tender was held to choose the equipment supplier of the private telecommunications network, BANKNET. The introduction of the latter system is expected to resolve the major problem regarding the establishment of interbank systems, i.e., the lack of a reliable and cost-effective communications medium to encompass all banks. Under this project the groundwork for the new modern network X.25 is expected to be laid by mid-1995. It will serve the needs of the payment process as well as promote the establishment of interbank systems.

### **BORICA**

For the BORICA system for bank card payments project a modern system has been established, which will be instrumental to the success of the national card-payment system. The main computer, along with the necessary software and technical equipment, which will be used in the process of authorization with the national card-payment system, have been installed. The legal framework for the system was developed as well. A laboratory for research and maintenance of ATM and POS terminals was also created. Since early 1994, the authorization center functions on an ongoing basis, allowing the participating banks to test the operation of the ATMs in real conditions.

### **Other Systems for Card Payments**

In 1994, the First Private Bank and Balkanbank announced the establishment of card systems to serve their customers, based on a debit card with magnetic tape and a chipcard, respectively. Balkanbank has introduced chipcard readers in a number of its branches, going through the initial steps of a daring project. A trend has developed in Bulgarian banks toward extensive investment in the new instruments of payment, based on magnetic cards, despite absent legal regulation and the high cost incurred by the establishment of incompatible systems.

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<sup>32</sup> GNP is estimated at BGL 560 billion.

## 2. Legal Regulation of Bank Activities

During the period under review, the BNB continued its legislative activity aimed at developing and improving the banking by-law regulatory framework.

The BNB Board adopted two regulations on enactment of the LSNC. One of these, *Regulations No. 12* of 24 March 1994, covers the terms and procedures for commercial bank lending to state-owned enterprises, companies and commercial companies whose liabilities to the state have been written off under the terms of the LSNC (State Gazette, issue 30 of 1994), and prescribes additional, more stringent criteria on the issuance of new loans to these enterprises. Banks shall not extend new credits to enterprises if they have receivables negotiated after 31 December 1990 which can be classified as nonperforming (bad) or doubtful (group B) within the meaning of Regulations No. 9 of 1993 of the BNB on the loan classification and formation of mandatory special reserves (statutory provisions) by banks. Moreover, before allocating credits, banks shall, in addition to assessing credit risk, analyze the programs for financial rehabilitation and restructuring of enterprises designed and adopted in compliance with Article 11 of the LSNC, taking into account the criteria set in these regulations. Programs, enterprises, companies and commercial companies shall submit to banks business plans drawn up in compliance with the prescriptions in these Regulations. In general, the new loans must be issued in tranches and be dependent upon the achievement of particular results and collateralized in real terms. Loans extended are classified as a medium-risk asset within the meaning of Regulations No. 8 of 1993 of the BNB on the capital adequacy of banks.

*Regulations No. 14* of 12 April 1994 on the sanctions applied to commercial banks incurring losses due to the sale of long-term government bonds below their market value (State Gazette, issue 36 of 1994) refer to commercial banks with a majority state holding. Where the BNB has found out that a commercial bank has sold bonds below their market value (formulated by special methods and applied to these regulations), it may refuse access of this bank to the interbank lev deposit auction, reduce by the amount of losses incurred, the bank's limit on the use of deposits for a three-month period, claim additional collateral against secured loans in the amount of the losses incurred, as well as refuse to refinance it through secured loans and rediscounting of securities for a term of up to three months.

*Regulations No. 15* of 4 May 1994 on the procedure for auction sale of movables placed as collateral with a bank (State Gazette, issue 41 of 1994) were adopted jointly by the BNB and the Ministry of Justice. This act specifies the procedure that banks may follow to undertake involuntary execution of movables placed as collateral in favor of those banks which have extended the loan. The movables are to be sold at an auction with overt or covert bidding, conducted by a commission assigned by the creditor bank in compliance with the terms and procedures set forth in these regulations. Provision is made for an appeal against possible illegal action by the auction commission.

*Regulations No. 2* on the permits (licences) introduced essential requirements for bank licence applicants. Control on receiving a bank licence was heightened by setting more strict criteria for business plans. The internal control system has been elaborately reworked. More strict requirements are provided for those who own or intend to acquire over 5% of the voting stock of a bank or the persons who will manage and represent it. Installments against subscribed shares up to the minimum required capital shall be made only in cash.

Certain requirements and limitations were introduced for nonbank financial institutions, providing for compliance with the country's foreign exchange regulation and protection of the rights and legal interests of their customers. There are new special provisions in the regulations which set forth the terms of business of financial houses. They shall be established as joint stock companies with a minimum paid in capital of BGL 10 million. To prevent financial houses from making furtive bank transactions, a special provision is introduced specifying the scope of trust management of others' money and other financial assets. Trust management of foreign as-

sets and funds in levs from banks are not permitted. Bank lending in levs to financial houses was limited.

*Regulations No. 8* on the capital adequacy of banks were amended. Thus the minimum capital required for establishment a bank was raised and shall be met within a specified deadline. To operate domestically banks must have minimum capital base of BGL 450 million, and BGL 800 million to operate domestically and abroad. The same capital requirements apply to granting bank licences and the minimum amounts of capital which must be fully paid in at the date of issuing the licence.

### 3. Balance Sheet Results of Commercial Bank Operations<sup>33</sup>

The period under review proved to be another crucial one for the banking system. Economic setbacks and accumulated internal problems led to growing losses in commercial banks. According to estimates, banks' net losses are expected to exceed BGL 8 billion, and gross losses, BGL 17 billion.

#### Bank Assets

Bank reserve position includes the high-liquid assets at the BNB and at commercial banks necessary to make payments in the economy and maintain the minimum reserve requirements with the BNB, and excess reserves where banks accumulate temporary surpluses in levs and foreign exchange. Reserves in foreign exchange increased significantly (118%) reflecting enhanced foreign payments.

#### RESERVES IN BGL/DEPOSITS RATIO

Indicators	1992	1993	June 1994	Dec. 1994
Reserves, million BGL	19,513	21,051	18,467	42,418
Deposits, million BGL	104,246	167,650	204,059	285,318
Reserves/deposits, %	18.7	12.6	9.0	14.9

Source: BNB.

Throughout the year, the level of reserves maintained by commercial banks almost matched the mandatory 10%. Only on 31 December (the date of striking off the balance), due mainly to seasonal factors, large concentration of cash holdings with individuals and companies occurred. Since these funds were temporarily out of use by banks, they appeared in their current accounts with the BNB, which led to an increase in bank reserves (to 14.9%). Therefore, the above ratio is atypical for the year as a whole, since liquidity shortfalls prevailed over liquidity overruns.

The dramatic increase in government securities (over 190%) is attributable to the inclusion in banks' portfolios of bonds in levs and foreign exchange issued under the LSNC.

Nonfinancial institutions were banks' most favored customers credits – to these enterprises increased by approximately 60% and made up the largest share in the bank system assets (42% of all assets). The banking sector credit portfolio contracted by the same percentage but in the opposite direction. Large as these credits may seem, they lagged far behind the compounded interest on credits extended over the year, which exceeded 100%.

The most significant increase among other less essential components of bank assets occurred in banks' holdings of nongovernment securities used for speculative purposes – an increase of 195% in bonds, and 175% in turnover portfolio stocks. Owing to the underdeveloped capital markets, their share in the total bank assets was under 1%.

<sup>33</sup> Data for 1994 covers the balance sheets of commercial banks and the SSB in December.

## Bank Liabilities

The tendency of the nonbank sector to crowd out the bank sector was displayed in bank liabilities as well. In 1993, the share of attracted funds from banks accounted for nearly 60%, while by 31 December 1994 it had fallen to 36%. The essential factor for the decrease in attracted foreign funds is related to writing off Bulgaria's obligations on the external debt from Bulbank. Attracted funds in levs from banks rose by 40%, and those attracted from nonfinancial institutions, by 70% (the increase almost matched the level of the average weighted interest rate on deposits). If the dramatic devaluation of the lev (102%) is eliminated, attracted funds in foreign exchange were below those attracted in levs.

### FUNDS ATTRACTED IN BGL

Indicators	(million BGL)	
	Dec.'93	Dec.'94
Funds attracted from banks, incl.	475,200	386,873
BGL	68,115	95,525
foreign currency	407,085	291,347
Funds attracted from nonfinancial institutions and other customers, incl.	221,873	422,748
BGL	167,650	285,318
foreign currency	54,223	137,429

Source: BNB.

Bank equity capital rose 66% (after the capital of the four newly established banks is deducted, the increase accounts for 42%). Despite the large increase, the funds allocated for the replenishment of supplementary capital and reserves are well below international and internal requirements. The capital to assets ratio accounted for about 5%, but after the new banks' effect is eliminated, it matched the 1993 level (i.e. insufficient to cover increasingly risky investments of banks).

During the period under review, four Bulgarian banks and two foreign bank branches began functioning. The latter were not subject to the requirement for paying in capital. In addition, 195 new branches of commercial banks were opened. Investing in long-term assets, if not accompanied by other profitable investments and an increase in capital, at this early stage of the development of the modern banking system in Bulgaria, may result in lower profitability and gains of commercial banks. Since no favorable conditions for the development of the banking sector in the country are in place, a territorial expansion, as ineffective as it is, proved to be a preferable alternative for retaining possible future economic areas.

In 1994, the consolidation of the banks with a majority state holding continued. It moved in two directions: through acquisition of small banks and merger of several commercial banks into a new one. In April, the BNB Board authorized the Purvomay Bank Ltd. to merge with Hebros Bank Ltd., Plovdiv, and in September, allowed Stara Zagora Bank Ltd. and Bourgas Ltd. to merge with Bulbank Ltd. In December, the BNB Board authorized Sirbank Ltd., Karlovo Commercial Bank Ltd., Sredets Commercial Bank Ltd. and Elin Pelin Commercial Bank Ltd. to merge into a new bank – Universalbank Ltd. – which was subsequently renamed Serdica Commercial Bank Ltd.

## 4. Relations with International Financial Institutions

In 1994, the BNB continued to develop ties with international financial institutions in close cooperation with the government. The major event of the year was the agreement of the Brady type concluded with the London Club creditor banks. The latter helped ease the debt burden of more than USD 9 billion in unserviced debt

and did much to enlarge Bulgaria's access to international financial markets. This deal has been accomplished with the active support of the IMF and the World Bank which coordinated the efforts of the international financial community to offset the cost.

### **International Monetary Fund**

As a result of long negotiations with the IMF, its Executive Board on 11 April approved two loans for Bulgaria, worth SDR 189.96 million (approximately USD 259 million), including SDR 69.74 million (approximately USD 97 million) under the third one-year stand-by agreement, and SDR 116.22 million (approximately USD 162 million) under the STF for transition economies. In September, another loan of SDR 69.74 million was disbursed under the stand-by agreement in support of the balance of payments following the conclusion of the debt reduction agreement with the London Club creditor banks. In the second half of the reporting year, due to noncompliance with the commitments contained in the memorandum to the agreement, the third tranche of the loan was not disbursed. Throughout the reporting year, loans of SDR 116.22 million were extended under the STF and SDR 116.24 million of total SDR 139.48 million under the stand-by agreement (with the increase in support of the country's debt reduction agreement).

Repayment of principal on loans disbursed until 1993 began in 1994, along with regular repayment of interest on debt to the IMF. Thus interest repaid on IMF loans accounted for SDR 28.09 million, and principals repaid totaled SDR 47.95 million. In 1995, principals outstanding on IMF loans account for SDR 162.29 million, and interest is expected to amount to SDR 35.53 million.

### **World Bank**

On 24 January 1994 the loan for Private Investment and Export Financing (PIEF) from the World Bank became operative. The first by-loan agreement was signed with the First Private Bank and throughout the year investment project financing accounted for USD 12 million. The portion earmarked for export financing has not been utilized due to weaknesses in the loan agreement. After consultations held between experts from the World Bank, BNB, First Private Bank and the MF two amendments of the loan agreement were made. The first one is already operative. The second amendment (agreed in principle) is in the process of formal coordination between the contracting parties. The funds from the loan will also provide for financing of the purchase of domestic raw materials; other financial instruments besides a letter of credit will be accepted as a guarantee on payments. This could increase the number of export financed projects. To date only one commercial bank is brokering the project. If the World Bank and the BNB allow more banks to act as agents on the project, this will enlarge access of potential projects to the loan agreement funds and will boost competition among banks.

In early 1994, the second Sectoral Adjustment Loan (SAL) tranche agreement of USD 100 million was concluded, with the full amount of the loan being drawn.

In October, the World Bank extended funds of USD 125 million on the loan in support of initial external debt payments and debt service.

Finalization of the Financial and Enterprise Sectoral Adjustment Loan (FESAL) of USD 150 million is in progress. The loan terms are consistent with the fulfilment of major objectives in the financial and industrial sectors in the context of structural reforms. They broadly reflect the parameters of the fourth stand-by agreement with the IMF currently in progress.

In 1994, an agreement was signed for the extension of an Agricultural Reform Loan. The loan was not ratified by the Parliament, however, and had to be revised. Bulgaria and the World Bank reached an additional agreement that funds from the loan may be used to cover the expenses on the supply of domestic raw materials. Thus, the country is expected to receive in 1995 USD 50 million necessary for the financing of both private farms and businesses engaged in processing of agricultural products.



**European  
Bank for  
Reconstruc-  
tion and  
Development**

As of 31 December 1994, projects for Bulgaria in the amount of ECU 387.7 million were approved; of these, EBRD financing accounts for ECU 129.2 million. The volume of allocated funds totals ECU 25 million.

Infrastructure projects for the development of a telecommunications network, energy and transport projects account for the largest share, 84%, and 16% of the funds will be provided for the expansion of private business.

In keeping with the assistance being extended to the banking and financial sector several banks and financial institutions were licensed by the BNB: Bulgarian Investment Bank, BNP – Dresdnerbank; the General Insurance Company and Euro-merchant Balkan Fund. All these were licensed with EBRD interest participation.

The EBRD rendered technical assistance of ECU 5.3 million in support of financial institutions (United Bulgarian Bank and Bulgarian Investment Bank), agricultural businesses, transport and environmental activities.

An Investment and Lending Program for 1995 has been worked out, with EBRD participation accounting for ECU 336.5 million, and the structure of final users has been modified (57% for private, and 43% for government projects).

Although significant progress in the relationships with EBRD has been achieved in 1994, the Bank's most important project in the sphere of finance was not accomplished – the extension of a USD 100 million loan for the recapitalization of the United Bulgarian Bank.

**European  
Investment  
Bank**

In 1994, project approbation and withdrawal of funds totaling ECU 30 million on the APEX loan (the loan for small- and medium-scale enterprises with intermediation) was delayed. One possible reason for this may be the lack of experience of mediator bank and potential borrowers in designing such projects in compliance with European standards. Another reason for the slow utilization of the credit line, as with PIEF, stems from the fact that only one bank, First Private Bank, has been approved as a mediator. Nevertheless, certain progress has been achieved so far – two projects of ECU 2 million have been approved, and four were presented to the EIB for approval.

For the better utilization of the APEX Loan the EIB concluded an agreement with the DFC consulting company, financed under the PHARE program, for rendering technical assistance to the agent bank in handling the loan. Experts will help the EIB and BNB in finding other banks which meet the requirements for mediation.

**Technical  
Assistance  
for Restruc-  
turing of the  
Banking  
System**

During the period under review, the BNB did much to provide adequate coordination of the technical assistance rendered to the BNB and the banking system by international financial institutions, as well as assistance received on a bilateral basis and under special programs.

The special missions of the IMF Monetary and Foreign Exchange Policy Division continued to render technical assistance to the BNB in the field of monetary statistics and economic and monetary policy analysis.

The work on fulfilment of PHARE projects which are broadly consistent with the structural reform efforts in the banking system commenced, in line with negotiations with the World Bank on the FESAL Loan. Agreements were signed on the auditing of eight big commercial banks (Sofiabank, Hebrosbank, Expressbank, Mineralbank, Economic Bank, Post Bank, Biochim Bank and Balkanbank). In addition, agreements on rendering technical assistance to restructure and further develop the SSB and the International Banking Institute were concluded. Preparatory work on the establishment of systems of nationwide significance such as the Creditworthiness Information System (with the support of the National Bank of France), the System for Early Warning Signs in Bank Supervision and Deposit Insurance Fund (both projects are supported by the National Bank of the Netherlands) commenced.

In 1994, the fulfilment of a technical assistance program developed jointly with the American government was in progress. The US Treasury continued to finance the activity of American advisors on bank supervision and economic and monetary policy analysis to the BNB and the United Bulgarian Bank.



## Group of 24

In 1994, Bulgaria received the remainder of funds coordinated by G-24 in 1991. Financial aid in support of the country's balance of payments was, as follows: USD 100 million from Japan (the last tranche is due in March 1995); ATS 210 million from Austria; ECU 14.5 million from Sweden; USD 13 million from Norway; USD 10 million from Finland.

Negotiations continue on new loan agreements within the 1994 coordinated G-24 financial aid in support of Bulgaria's balance of payments.

## 5. Personnel and Qualification

The total number of BNB personnel was 1,044 persons as of 31 December 1994.

### PERSONNEL OF THE BULGARIAN NATIONAL BANK

(number of people)

BNB	707
Branches	251
Plovdiv	59
Varna	42
Bourgas	59
Pleven	55
Haskovo	36
Resort centers	86
Total	1,044

Source: BNB.

Throughout the year, the BNB continued to pursue open policy for selecting and recruiting its personnel. The major criteria adopted were expertise and professional skills of the applicants. The number of newly recruited staff totaled 147, and those who left totaled 42.

Remuneration of bank staff and their benefits were in compliance with the Collective Labor Agreement and other effective specific legislation in this area.

In 1994, a PHARE financed project on human resources management in the BNB was underway. The project includes the following essential issues: updating of the functional characteristics and design of a system for job classification and assessment and application of modern methods in recruiting personnel.

The publication of a specialized bulletin, "Personnel Management" was initiated in 1994. The publication provides current information on various issues concerning bank personnel activities.

The BNB, in order to fulfil its personnel management policy, continued to invest funds for training, in order for staff to be able to meet the new requirements and trends in the development of the banking system.

In the past year, the BNB received technical assistance for training from other countries' central banks (Austria, United Kingdom, Switzerland, Italy, USA, etc.) and other specialized international institutions and organizations (the IMF Institute, the United Vienna Institute, etc.). In 1994, 78 BNB employees participated in various forms of training abroad. Training covered the following areas: monetary policy, economic and monetary analysis, foreign exchange operations, bank supervision, bank management, information technologies, bank accounting. English and computer courses (Microsoft Word 5.5 and Quattro Pro 3.1) as well as other specialized seminars were run by the International Bank Institute.



**VIII. Major Trends  
in Monetary Policy in 1995 and 1996**



BNB monetary policy closely coordinated with the fiscal policy of the government will be the key to the growth of the national economy.

In 1995 and 1996, the BNB will continue to pursue a monetary policy aimed at maintaining the internal and external stability of the lev. This will be accomplished within the macroeconomic parameters and government intentions relating to fiscal and income policies set during these years.

**BNB major monetary policy goal** is to subdue inflation. Given the already-stated factors which led to a double inflation rise from 1993, the only way to successfully subdue inflation in 1995 is through a radical change in general economic conditions. To this end, tightened monetary restriction in 1995 will play a positive role only in combination with extensive structural reform – primarily privatization, political stability and maintenance of restrictive fiscal and income policies. Accomplishment of these objectives in 1995 will ease monetary constraints in 1996 and accelerate the economic growth which has already begun.

Restoration of confidence in the national currency after the March foreign exchange crisis will be of crucial importance in achieving monetary policy goals. Enhanced demand for levs will promote monetary policy implementation, and though it entails a real reduction in money supply, this will provide sufficient credit resources to the government and the real sector. This goal may be achieved by an acceptable interest rate and foreign exchange policy which will encourage lev investments. These, combined with tightened monetary constraints, will reverse inflation and inflationary expectations. Only after a significant reduction in annual inflation can there be further reduction in interest rates, which in turn will ease domestic government debt servicing by the budget and foster investments and real sector recovery. Low inflation rates in 1996 will help, via an adequate monetary policy, to boost economic growth.

**Stabilization of the banking system** will be vital for successful monetary policy. Inherited bad debt problems were not completely settled by government bonds issues under the LSNC in 1994, and added challenges resulted from extension of new nonperforming credits and expansion of foreign exchange risk. Overcoming these challenges requires fast and decisive actions coordinated with the government, financially bound to the 1995 state budget. These actions include rehabilitation and restrictive measures for Economic Bank and Mineralbank, as well as recapitalization of other banks with liquidity and capital shortfalls.

Measures undertaken to stabilize Economic Bank and Mineralbank are intended to restructure the assets and liabilities of these banks, and reduce balance sheet total and constraints on their lending activity. The balance sheet total will be reduced until 31 May 1995 by replacing bonds issued under the LSNC with newly-issued government securities (per CM Decree No. 89 of 1995) in the portfolio of the banks. The newly-issued government securities will repay the banks' debts to the BNB and SSB. The BNB will continuously control the operation of these banks, including the fulfilment of their obligations on restructuring. Elimination of the need to refinance the banks will ease BNB monetary policy implementation, and be an indication of the operation's success. Government securities issued under CM Decree No. 89 of 1995 aimed at rehabilitation of these two banks will ensure a yield equal to the basic interest rate. This will help avoid the substantial quasi-deficit which in 1994 was directly financed by the BNB. As a result, the BNB will preserve its ability to refinance commercial banks.

In 1995 and 1996, **money supply** will be used as a nominal anchor in financial stabilization. Money supply growth will be controlled through reserve money management based on a projected change in the money multiplier. At the same time, the BNB will use the relationship between the exchange rate and reserve money, preserving the floating exchange rate of the lev to the US dollar, Deutschemark and Swiss franc.

Given a lasting contraction in the money demand – by 12% in real terms by the end of 1995 – the inflation rate of 45% projected in the budget is achievable. This will not lead to any substantial changes in the velocity of money circulation, and will help avoid additional difficulties as the economic recovery progresses. Evidence indicates that a consistent BNB restrictive monetary policy will revive shaken confidence in the national currency, and foreign exchange deposits will grow by approximately 5%, including accrued interest. Provided that a real lev appreciation occurs as this monetary policy is pursued, the real contraction in the lev component of money supply will exceed that of broad money, reaching 15% by 1995.

Despite the conclusion of the foreign debt deal with the London Club, foreign investments are expected to grow modestly in 1995. If positive balance of payments trends continue and funds from official sources are provided to service foreign debt in 1995, it would be reasonable to raise BNB and commercial banks' net foreign assets by USD 300 million. If this occurs, the opportunities for expansion of **domestic credit** will depend on money supply growth and will be consistent with it.

Credit to the real sector underscores the difference between total domestic credit and credit to the government, resulting from bank financing of the cash deficit projected in the SBL. A consistent restrictive 1995 fiscal and income policies will limit the lev bank credit to the government sector by approximately BGL 22 billion, and credit to the real sector will decrease by approximately 17% in real terms. By providing a nominal growth of the lev credit to the nongovernment sector of approximately BGL 40 billion, which means a real contraction of 12%, foreign exchange credits should be reduced by the same amount. Within this scheme any additional need for direct budget financing will crowd out the real sector from the credit market, with negative effects for the economy. Currently, it is impossible to provide exact numerical estimates for 1996 monetary and credit aggregates. They will be finalized with the government during preparation of the 1995 state budget framework. These estimates will be determined within the BNB's anti-inflationary program.

**BNB foreign exchange policy** in 1995 and 1996 will be directed toward maintaining the external viability of the national currency, and will counterbalance any dramatic movements in the real exchange rate. By supporting the general monetary restriction, a slight appreciation of the lev is possible. This, however, will not affect competitiveness of Bulgarian exports. At the same time, the BNB will directly intervene in the domestic forex market, as well as use other monetary policy tools in order to level off sharp fluctuations in the exchange rate. To offset the expected sharper lev devaluation in autumn and winter of 1995/1996, it is reasonable to project for the whole year a trajectory of a sustainable nominal depreciation, avoiding traditional turns. This can be achieved through an adequate interest rate policy.

**BNB interest rate policy** will be further used to implement monetary restriction and to repress inflation. Given the shaken confidence in the lev which was partly restored in 1995 first quarter, savers' losses registered in 1994 must be decreased in order to avoid erosion of the lev deposit base. At the same time, it will hardly be possible to provide a real positive annual interest rate on deposits due to the excessive rates currently paid by borrowers. To this end, the BNB will maintain a basic interest rate dependent upon the registered inflation rate and in line with the monetary policy objectives. Since the basic interest rate still determines commercial bank interest rates, real deposit interest rates are likely to stay slightly negative and real lending interest rates slightly positive.

Successful implementation of the monetary policy will result in subdued inflation, and a subsequent gradual decrease in interest rates. In this scenario, the restrictive monetary policy in 1995 will be maintained by raising minimum reserve

requirements. This tool will be a signal for commercial banks to collect credits, and to avoid real credit expansion. Achievement of financial stability and improved discipline in 1996 will allow for a decrease in the minimum reserve requirements. Increased credit resources should be channeled to the nonfinancial sector to support the economic recovery.

**Open market operations** will be the cornerstone of BNB monetary policy. To this end, the BNB portfolio shall contain a sufficient amount and variety of government securities to regulate commercial bank liquidity. Consequently, the amount and structure of government securities issued to finance the cash deficit will be of essential importance. Securitization of a portion of the extended direct credit to the government and the exchange of BNB long-term government securities by SSB short-term government securities are important means for replenishing the BNB portfolio of government securities.

Another key determinant of the success of BNB monetary policy will be coordination of intentions and activities between the BNB and the government. **Consistent monetary and fiscal policies** will maintain financial stability at an acceptable social cost. While pursuing its monetary policy the BNB will rely on the support rendered through the fiscal policy, which provides for discontinuation of the current practice of direct crediting of the budget by the BNB; and rechanneling of cash deficit financing to the capital market at market prices. More extensive nonbank financing of the budget deficit will be crucial for the monetary policy to overcome fiscal policy pressures.

The improved macroeconomic conditions necessary for implementation of the monetary policy in 1995 and 1996 strongly depend on the **support of international financial institutions**. This comes in the form of a new agreement with the IMF and a loan from the World Bank for restructuring of the real and financial sectors. Official foreign financing would partially offset expenditures on foreign debt servicing and would replenish foreign exchange reserves, allowing the BNB to pursue its foreign exchange policy goals. Moreover, this will help subdue inflationary expectations as well as fears of an external devaluation of the national currency. The absence of agreements with international financial institutions will limit official foreign financing, which in turn will raise the social cost of financial stability.

