The Bulgarian Financial Sector

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This paper gives a comprehensive overview of the financial sector in Bulgaria. While the primary focus lies on the banking sector as the main channel of financial intermediation, capital markets for Bulgarian assets are analyzed as well. After a brief description of the turbulent historical development of the banking sector, its main features today are presented. An in-depth analysis of the structure of assets and liabilities is then followed by an investigation of the role of foreign exchange. The present study confirms that the share of foreign currency-denominated domestic claims in total domestic claims on nonbanks has increased and that the share of foreign currency-denominated deposits in total domestic deposits of nonbanks has decreased. To explain these observations the study refers to the ongoing real appreciation process against the backdrop of the currency board arrangement which has been in place since mid-1997. Next, the development of profitability, capital adequacy and asset quality is explored. Finally, a special section is devoted to the role of Austrian banks in Bulgaria, which have a market share of about 11.5% and enjoy high profitability.

1 Introduction[1]

Following the financial crisis during 1996–1997, the Bulgarian banking sector has gone through an impressive process of stabilization in recent years, which has involved the privatization of most banks, predominantly through foreign investors. This has led to a deepening of financial intermediation, although the share of banking assets in percent of GDP remains relatively modest by international and even Central and Eastern European (CEE) standards. Despite the intensified competition and smaller interest rate margins, return ratios have remained above those observed across the EU-15. Notwithstanding the shift in lending activity toward nongovernment borrowers and the intensification of domestic lending activity, Bulgarian banks are adequately capitalized, and the share of nonperforming assets has significantly declined. This environment also offers interesting business opportunities for Austrian banks. At the end of 2003, two Austrian banks were active on the Bulgarian market, with a combined market share of more than 10%. Although the assets held in Bulgaria represent only a tiny proportion of Austrian banks' total assets in the CEE region, business in Bulgaria stands out in terms of profitability.

2 A Short History of the Bulgarian Banking System

Following major political changes, the Bulgarian banking system was transformed from a one-tier to a two-tier system comprising a central bank and several commercial banks at the end of 1989. Banks which had previously specialized in selected sectors were transformed into universal banks providing financial services to all sectors of the economy. At the same time, the 59 branches of the Bulgarian National Bank (BNB) were transformed into commercial banks. As the large number of state-owned commercial banks had proved to be inefficient, the government created the Bank Consolidation Company (BCC) to encourage the establishment of larger operating units through mergers. As a result, the total number of banks was reduced from 81 in 1992 to 42 in 1995. At the same time, policies discouraged foreign banks

[1] *The author would like to thank Vanessa Redak, Thomas Reininger and Helene Schuberth for their valuable comments on this paper.* *This study represents a follow-up on Barisitz (2001). See also his analysis of the Romanian financial sector (Barisitz, 2004).*

from entering the Bulgarian market. It was not until 1994 that the first foreign investors entered the market, when the Greek Xios Bank and the Dutch ING bank set up branches in Sofia. By the end of 1995 two other banks had opened branches, and three foreign banks had received full banking licenses.

The legal system sluggishly adjusted to the new environment. The Law on the Bulgarian National Bank came into effect in June 1991, and in 1992 the Law on Banks and Credit Activity was passed. Although this latter law introduced a regulatory framework for commercial banking activities, regulatory controls remained limited, and banks operated in an environment without proper supervision.

Credit policies were often characterized by soft budget constraints (in particular with respect to traditionally large borrowers, i.e. the sizeable loss-making state enterprises that lacked reform), which finally resulted in an unprecedented boom in commercial credit to the nonfinancial sector. Coupled with inadequate laws, insufficient institutional capacity and limited (foreign) competition, this credit boom led to a surge in bad loans. By 1995 roughly 75% of all bank loans were classified as nonperforming (substandard, doubtful or loss).

Faced with this situation, the BNB increasingly provided liquidity to the market to prevent large banks from failing, finally losing control of money supply and inflation. This series of events culminated in a financial (i.e. currency and banking) crisis in 1996–1997, which included a brief period of hyperinflation several banks did not survive and reduced the number of banks to 30 by the end of 1996.

Having learnt from the crisis, Bulgarian policymakers reformed the laws on the BNB and on commercial banks to correct the shortcomings of earlier regulations. In mid-1997 a currency board arrangement was introduced, which imposed strict controls on money supply. Encouraged by the IMF and the World Bank, the Bulgarian authorities embarked on the privatization of the banking sector.

3 The Current Structure of the Banking System

These efforts have shown many positive results. By the end of 2003, around 98% of the total assets of the banking sector were in private ownership. In 1996 this share had only amounted to 18%. Privatization was mainly conducted through foreign investors: Foreign-owned banks (among them the country's five largest banks) accounted for around 85% of total banking assets at the end of 2003.[2]

Table 1

Banking Institutions

	1997	1998	1999	2000	2001	2002	2003
Number of banks	34	34	34	35	35	34	35
Share of private banks in total assets (%)	32.8	39.4	53.4	80.2	80.1	83.5	98.0
Share of foreign banks in total assets (%)	18.0	32.3	44.7	73.3	75.0	72.0	86.0
Number of employees	..	..	..	..	22,266	21,616	20,997

Source: Bulgarian National Bank.

[2] *The values for private and foreign ownership at end-2003 are approximative, calculated on the basis of end-2002 and mid-2003 values plus the share of DSK bank, which was sold to the Hungarian OTP in the second half of 2003.*

Back in 1996 their share had only been 9.6%. Out of the banks held in majority foreign ownership in 2003, six were branches of foreign banks.

While the financial sector continues to be dominated by the banking sector, the nonbank financial sector comprises mostly pension funds and insurance companies.

The net asset value of the eight Bulgarian pension funds amounted to BGN 510 million (around EUR 260 million) at the end of 2003, which represented less than 3% of total banking sector assets. The funds almost exclusively invest domestically, with government securities, bank deposits and mortgage bonds being the most widely used investment vehicles.

At the end of 2003, 31 insurance companies operated in Bulgaria, and their total assets amounted to around BGN 800 million (EUR 410 million). Of these, 17 were foreign owned (including one branch), accounting for nearly 60% of total assets. As to the distribution of assets, a differentiation can be made between non-life and life insurance companies. The former invested mainly in fixed-income securities, had deposits with credit institutions or held cash, while the latter primarily invested in fixed-income securities, shares in affiliated undertakings and in participating interests as well as in real estate used for own purposes.

Table 2

Concentration and Competition

	1997	1998	1999	2000	2001	2002	2003
Market share of three largest banks in total assets (%)	. .	. .	51.7	49.9	46.1	43.3	40.5
Market share of five largest banks in total assets (%)	. .	. .	62.3	60.4	56.6	55.3	52.9
Herfindahl-Hirschman Index	. .	. .	1,159	1,094	930	835	770
Interest rate spread (rate on new loans minus rates on new time and savings deposits)	11.3	10.7	9.8	10.9	10.7	9.8	8.6

Source: Bulgarian National Bank, OeNB calculations.

The changes in the ownership structure of banks have also contributed to increased competition in the Bulgarian banking system. At the end of 2003 there were 35 banks operating in the country. The three largest banks accounted for around 40% of total banking assets, while the share of the five largest banks was 53%, which is a lower share than in most new Central European EU Member States. Also the Herfindahl-Hirschman[3] index of banking sector assets provides evidence of an increase in competition over the past decade. The index value declined from 3,000 in 1993 to 1,159 in 1999 and further to 770 at the end of 2003.

The development of the interest rate spread (defined as the difference between interest rates on deposits of and loans to nonfinancial corporations and households) may serve as an indicator for the development of competi-

[3] *The Herfindahl-Hirschman index is calculated as the sum of the squared market shares (in percentage points) of individual banks. It can take values between close to zero and 10,000, with values below 1,000 suggesting a non-concentrated, values between 1,000 and 1,800 a moderately concentrated and values above 1,800 a highly concentrated market.*

tion as well. This spread peaked during the financial crisis in 1996 at around 270 percentage points and fell to 10 percentage points by the late 1990s. Since then the spread has gradually narrowed and reached 8.6 percentage points by the end of 2003.[4] When looking at the interest rate spread, however, it should be taken into consideration that its development may also be influenced by factors other than competition. In this context I would like to highlight the improvement in the quality of credit portfolios over the past few years, which has probably led to a decline in the required risk premium on loan rates. Furthermore, when considering the higher interest margins in earlier years, one should bear in mind that during periods with large amounts of bad loans the anticipated high net interest income was not actually received. Loan loss provisioning and the writing off of bad loans narrowed the effective interest margin and dented banks' profitability.

4 The Structure of Bank Assets and Liabilities

While commercial banks' assets were bloated by uncollectible loans during the early phase of Bulgaria's banking history, the financial crisis of 1996–1997 erased much of these assets. The ratio of total banking sector assets[5] in percent of GDP fell from 180% in 1996 to less than 50% one year later and further to 37.1% in 1998. Despite relative asset growth since then, financial intermediation has remained low in Bulgaria, with banking assets amounting to 52.6% of GDP at the end of 2003. This compared to more than 270% in the euro area, 81.2% in the ten new EU Member States and 75% in the eight Central and Eastern European new EU Member States.

Table 3

Structure of Claims on Domestic Sectors

	1997	1998	1999	2000	2001	2002	2003
	BGN million, end-of-period						
Domestic claims on general government	2,168	1,543	1,233	1,099	1,378	1,958	2,051
Domestic claims on nonmonetary financial institutions	8	12	17	29	59	100	252
Domestic claims on nonfinancial companies	1,451	1,878	2,334	2,713	3,447	4,839	6,660
Domestic claims on households	167	476	522	618	934	1,385	2,502
Domestic claims	3,794	3,909	4,105	4,459	5,818	8,282	11,464
	% of GDP						
Domestic claims	21.8	17.4	17.3	16.7	19.6	25.6	33.3

Source: Bulgarian National Bank, OeNB calculations.

4 *For the average loan rate I used volume-weighted interest rates on new loans to nonfinancial corporations and households (excluding overdrafts). For the average deposit rate I used volume-weighted interest rates on new time and savings deposits (excluding overnight deposits).*

5 *In this paper the banking sector is defined as "other monetary financial institutions" (i.e. excluding the central bank). Total banking sector assets also comprise claims on domestic monetary financial institutions, including the central bank.*

Total domestic claims (e.g. credits[6], securities and repurchase agreements) – excluding interbank claims and claims on the central bank – represented 63% of total banking sector assets, or 33% of GDP, at the end of 2003. While the share of domestic claims in total assets remained nearly unchanged from 1997 (45%) to 2000 (43%), it then jumped by 20 percentage points to 63% in 2003. At the end of 2003, the bulk of domestic claims consisted of claims on nonfinancial corporations (58.1%). This share rose between 1997 (38.2%) and 2000 (60.8%) as banks started to restructure their portfolio away from claims on the general government. Since then claims on nonfinancial corporations have lost some terrain to claims on households. The latter accounted for 22% of total domestic claims at the end of 2003, compared to a meagre 4.4% in 1997. Thereby, lending to households has become the second-biggest business area for Bulgarian banks. Claims on the general government accounted for 18% of total domestic claims at the end of 2003, sharply down from the 57% seen in 1997. Claims on nonmonetary financial institutions play a subordinate role for Bulgarian banks.

Credits to domestic clients (excluding credits to monetary financial institutions) accounted for about half of total banking sector assets at the end of 2003. Thus, credits to domestic sectors dominated domestic claims with a share of around 80%. The importance of domestic credits has been growing steadily since the financial crisis, when, at the end of 1997, they accounted for only 42% of total domestic claims. The bulk of domestic credit (71%) was directed toward nonfinancial companies. This share, however, has modestly declined over the past few years, as banks intensified their lending activity toward households, particularly during 2003. Credits to households now account for 27% of total domestic credits, compared to only 19% in 2000. Within this category, credits for house purchases have had a relatively stable share of around 16% to 17% of total credits to households since 1999. Credits to the general government and nonmonetary financial institutions play a negligible role.

Table 4

Structure of Credit to Domestic Sectors

	1997	1998	1999	2000	2001	2002	2003
	BGN million, end-of-period						
Domestic credit to general government	1	25	2	2	5	8	25
Domestic credit to nonmonetary financial institutions	8	11	17	24	52	92	123
Domestic credit to nonfinancial companies	1,427	1,811	2,281	2,645	3,389	4,774	6,575
Domestic credit to households	167	476	522	618	934	1,385	2,502
Domestic credit	1,603	2,323	2,822	3,290	4,380	6,259	9,225
	% of GDP						
Domestic credit	9.2	10.4	11.9	12.3	14.7	19.4	26.8

Source: Bulgarian National Bank, OeNB calculations.

6 *I use the term credit as a synonym for loan as opposed to claim, which includes credits/loans, securities and repurchase agreements.*

Securities issued by domestic residents play a subordinate role for Bulgarian banks. Debt securities issued by the domestic sectors accounted for 18% of total domestic claims (or 11.5% of total assets, respectively) at the end of 2003. These securities were almost exclusively issued by the general government (share of 97.5%). The weight of holdings of equity stakes in domestic corporations in total banking sector assests remained negligible (0.3%). The same holds for repurchase agreements with domestic clients, which had a share in total banking sector assets of 0.6%.

Table 5

Structure of Assets

	1997	1998	1999	2000	2001	2002	2003
	BGN million, end-of-period						
Domestic claims	3,794	3,909	4,105	4,459	5,818	8,282	11,464
Claims on monetary financial institutions (incl. central bank)	1,276	1,030	1,109	1,000	1,367	1,779	2,059
Foreign assets	2,417	2,460	2,904	4,082	4,665	3,803	3,003
Fixed assets	269	455	511	593	707	884	1,052
Other assets	704	456	228	228	296	407	520
Total assets	8,460	8,310	8,859	10,362	12,853	15,156	18,098
	% of GDP						
Total assets	48.5	37.1	37.2	38.7	43.3	46.9	52.6

Source: Bulgarian National Bank, OeNB calculations.

Claims on monetary financial institutions accounted for around 11% of total assets at the end of 2003. This share had fallen following the financial crisis until 2000 (9.7%), but has recovered since then, mainly thanks to claims on the central bank (mandatory reserves and cash).

Parallel to the strengthening of domestic lending activity, foreign assets have been playing a diminishing role in total banking sector assets since the end of 2000. Between the end of 2001 and 2003, they even fell in nominal terms, by almost 40%. At the end of 2003, they accounted for about 17% of total assets, compared to 7.5% in 1995, 15% in 1996, 29% in 1997 and nearly 40% in 2000.

On the liabilities side, deposits of domestic sectors accounted for two-thirds of total liabilities[7] at the end of 2003. Not surprisingly, households were the largest depositors with a share of 58% of total deposits. Nonfinancial corporations came in second to households in terms of deposit volume. However, their share declined from 45% in 1997 and 36% in 2000 to 32% in 2003. The share of the general government and of nonmonetary financial institutions in total deposits was around 10%.

Banks have generally maintained a negative net position[8] against households over the past decade. Following the financial crisis banks' net position against households deteriorated in real terms (deflated by consumer prices) until 2002. In 2003 accelerating growth of credits to households has led to an improvement in the net

7 *Total liabilities also comprise liabilities to domestic monetary financial institutions, including the central bank.*

8 *Net position is defined as claims less deposits, i.e. repurchase agreements, debt securities issued, credits received and equity are not taken into account on the liability side.*

position in real terms by more than 5%. Banks maintained a positive net position toward nonfinancial corporations in all these years, apart from the period of 1997–1998, which followed a sharp contraction of lending activity to nonfinancial corporations in real terms during 1996–1997. This position has expanded rapidly in real terms since 2000, as robust economic growth has fueled credit demand by the corporate sector. Bulgarian banks have traditionally been net creditors to the general government as well. Nevertheless, mirroring the sound fiscal policies that have been in place to complement the currency board, this net position decreased substantially in real terms (by almost 60%) from 1997 to 2003, with a sharp decline from 1997 to 2000 being followed by a moderate increase between 2000 and 2003. The overall net position of the banking sector against all domestic sectors (excluding monetary financial institutions) has been dominated by the huge negative net position against households and has been negative since 1997. Nevertheless, increasing lending activity has recently led to an improvement and the negative net position narrowed by roughly 80% during 2002–2003.

As a combination of the huge stock of claims on and low liabilities to the central bank, banks have held a positive net position against the monetary authority.

Table 6

Stucture of Deposits

	1997	1998	1999	2000	2001	2002	2003
	BGN million, end-of-period						
Deposits by general government	274	340	322	313	457	580	927
Deposits by nonmonetary financial institutions	150	168	161	141	203	237	312
Deposits by nonfinancial companies	2,107	2,078	2,169	2,337	2,905	3,410	3,884
Deposits by households	2,164	2,416	2,899	3,659	5,135	5,813	6,935
Deposits, total	4,696	5,002	5,551	6,451	8,699	10,040	12,058

Source: Bulgarian National Bank, OeNB calculations.

While the share of foreign assets in total assets rose only until 2000, the share of foreign liabilities in total liabilities has increased continuously over the past few years to slightly more than 8% at the end of 2003 (1997: 2.2%). This increase took place primarily in the form of taken foreign currency deposits. The banks' net foreign asset position deteriorated

Table 7

Structure of Liabilities

	1997	1998	1999	2000	2001	2002	2003
	BGN million, end-of-period						
Deposits, total	4,696	5,002	5,551	6,451	8,699	10,040	12,058
Foreign liabilities	183	212	334	547	697	894	1,498
Repos	0	0	0	0	0	0	99
Debt securities issued	0	0	0	0	6	19	56
Liabilities to monetary financial institutions (incl. central bank)	374	410	367	459	557	788	707
Capital and reserves	795	1,135	1,283	1,493	1,637	1,922	2,270
Other liabilities	2,411	1,551	1,323	1,412	1,256	1,493	1,408
Total liabilities	8,460	8,310	8,859	10,362	12,853	15,156	18,098

Source: Bulgarian National Bank, OeNB calculations.

in nominal terms by more than 60% from 2001 to 2003, after having increased substantially from 1997 to 2001. Thus, on the banking sector's balance sheet, the recent narrowing of the negative net position against all domestic nonbanks (resulting from domestic credit growth significantly outpacing domestic savings growth) was matched by the decrease in the banking sector's positive net foreign asset position (resulting from a decrease in foreign assets and an increase in foreign liabilities).

5 The Role of Foreign Exchange

The financial crisis between 1996 and 1997 led to a sharp loss of confidence in the local currency in Bulgaria. The share of foreign currency-denominated assets[9] in total banking sector assets jumped from 38% at the end of 1995 to 68.5% at the end of 1996. Since then this share has gradually decreased, to 64.6% in 1997, 58.2% in 2000 and 49.3% in 2003. This development was based on the opposite movements of the two main sub-components. *First,* as already mentioned above, foreign assets as a share of total assets increased up to 2000 and fell sharply thereafter. *Second,* foreign currency-denominated domestic claims on nonbanks as a share of total domestic claims on nonbanks peaked in 1996 at 69.8% (40% of total assets). Then, their share fell to 58% (26% of total assets, respectively) in 1997 and further to 33% (14% of total assets, respectively) in 2000. From 2000 to 2003, however, the share of foreign currency claims in domestic claims on nonbanks rose to 43% (27% of total assets, respectively), in contrast to the sharply falling share of foreign assets.

Looking at different sectors at the end of 2003, 55% (2000: 42%) of total claims on nonfinancial companies and 77% (2000: 71%) of total claims on nonbank financial institutions were denominated in foreign currencies. On the other hand, less than half (43%) of claims on the general government and only 9% of claims on households were denominated in foreign currencies. Nevertheless, the share of foreign currencies in total claims on households has risen rapidly over the past few years (2000: 3%, 1998: 0.8%). The share of foreign currencies in interbank claims has remained high over the past few years and stood at nearly 70% at the end of 2003. In contrast, claims on the central bank are dominated by the local currency.

Table 8

The Role of Foreign Exchange

	1997	1998	1999	2000	2001	2002	2003
	% of total, end-of-period						
Domestic foreign exchange credit	51.8	39.2	40.0	35.9	36.0	42.2	43.2
Domestic foreign exchange claims	58.2	42.0	39.9	33.3	35.1	41.4	43.1
Foreign exchange assets	64.6	57.9	56.7	58.2	57.6	53.4	49.3
Foreign exchange deposits	54.4	52.0	53.2	54.2	56.9	53.2	47.9
Foreign exchange liabilities	40.8	41.7	41.7	42.6	47.3	46.5	44.9

Source: Bulgarian National Bank, OeNB calculations.

9 *This item consists of foreign currency-denominated foreign assets, foreign currency-denominated claims on domestic nonbanks and against monetary financial institutions and foreign currency-denominated other assets.*

On the liabilities side, foreign currency-denominated liabilities[10] accounted for 44.9% of total liabilities at the end of 2003. After increasing to 47.3% in 2001, this share has decreased despite the further rise in the share of foreign liabilities in total liabilities mentioned above, as the share of foreign currency-denominated deposits of nonbanks in total domestic deposits of nonbanks has sharply fallen from 56.9% in 2001 to a low of 47.9% in 2003.

Thus, the banking system maintained a positive net foreign currency asset position of about 4.5% of total assets, equivalent to 2.3% of GDP in 2003, representing a significant decline from 24% (44% of GDP) in 1996 and 16% (6% of GDP) in 2000. Nevertheless, this on-balance sheet position must not be confused with banks' overall net open foreign currency position, as it may be counterbalanced by off-balance sheet items. According to data provided by the central bank, Bulgarian banks had a net short foreign currency position of 4.9% of the capital base at the end of 2003 (or 0.3% of GDP), suggesting limited exposure of banks to foreign currency risk.

The significant role of foreign exchange in the banking sector may be explained by the Bulgarian exchange rate regime, which is based on a currency board. This type of regime eliminates short-term exchange rate fluctuations and sharply reduces the risk of changes in the exchange rate over the medium term. With the currency risk being perceived as relatively low, cheaper financing in foreign currencies is attractive for domestic entities. At the same time, investments in assets denominated in Bulgarian lev and thus also lev-denominated deposits on the banks' liabilities side are attractive, as they receive higher interest returns. The positive interest rate differential compared to the euro can, among other things, be explained by higher inflation rates in Bulgaria due to the catching-up process (note: in the case of a nominally fixed exchange rate, the equilibrium real appreciation takes place through higher inflation). In addition, the large share of foreign currencies may also be interpreted as a sign of confidence in the sustainability of the currency board arrangement.

Even though there is little risk of a change in the exchange rate of the lev against the euro and the banking sector's open foreign exchange position is small, the indirect foreign exchange risk should not be completely neglected. About 20% of foreign currency credit to nonfinancial corporations and 15% of foreign currency credit to households were denominated in currencies other than the euro at the beginning of 2004. Since households in particular are unlikely to be hedged against foreign currency risk, large movements in the exchange rate of the euro against other currencies may have an impact on their ability to service their foreign currency liabilities. Therefore, the dynamics of foreign currency lending to households and the currency composition need further monitoring.

[10] *This item consists of foreign currency-denominated foreign liabilities, foreign currency-denominated liabilities toward domestic nonbank and toward monetary financial institutions and other foreign currency-denominated liabilities.*

6 Asset Quality

Despite the expansion of credit activity and the shift to more risky assets, the asset quality of Bulgarian banks has improved over the past several years. While nonperforming assets accounted for 14% of total risk exposure[11] in 1997, their share decreased to 4.2% by the end of 2003. At the same time, the share of standard assets rose by roughly the same amount from 83.3% to 92.7%, while the share of watch assets rose by 0.4 percentage point to 3.1%. This improvement came primarily on the back of a fall in the share of loss assets from 10.6% to 2.5%. The share of substandard and doubtful assets has decreased by less than one percentage point each since 1997. This development reflected partly the writing off of unrecoverable assets and partly an improvement in the efficiency of banks' risk control mechanisms, more sophisticated prudential supervision and improved corporate governance.

However, as the International Monetary Fund (IMF) pointed out in its Financial System Stability Assessment in August 2002, these ratios of classified assets were distorted significantly downward by including deposits in foreign banks into total risk exposure. According to the IMF's calculations from March 2002, the adjustment for this factor would push the share of watch loans and nonperforming loans (i.e. substandard, doubtful and loss loans) from 6% to 13%. On the other hand, the IMF's correction to derive at internationally comparable levels does not put into doubt the significant improvement in credit quality. It should be noted that deposits in foreign banks, the main component of total foreign assets, have sharply fallen from 2001 to 2003, when they were lower than in 1997.

Table 9

Asset Quality

	1997	1998	1999	2000	2001	2002	2003
	%, end-of-period						
Standard assets ratio	83.3	87.3	88.3	91.7	92.3	93.5	92.7
Watch assets ratio	2.7	3.5	3.8	2.9	3.2	2.9	3.1
Substandard assets ratio	2.0	2.2	1.1	1.4	1.1	1.0	1.1
Doubtful assets ratio	1.5	0.6	1.2	0.9	0.9	0.5	0.7
Loss assets ratio	10.6	6.3	5.5	3.0	2.5	2.1	2.5
Reserves and provisions ratio	..	..	..	6.3	4.9	4.1	3.9

Source: Bulgarian National Bank, OeNB calculations.

In addition to the more favorable composition of assets, Bulgarian banks have also provisioned relatively well. Reserves and provisions amounted to 3.9% of total risk exposure at the end of 2003 and hence covered slightly more than 90% of nonperforming assets (according to national methodology). However, this coverage ratio represented a decline from 117% in 2000.

In addition, increased lending activity toward nonfinancial corporations and households may further increase the risk potential over the next couple of years. After an increase in

[11] *Nonperforming assets are defined as substandard, doubtful and loss assets. Classified assets are defined as watch assets plus nonperforming assets. Total risk exposure is defined as claims on banks and other financial institutions, claims on nonfinancial institutions and other customers and other balance sheet exposures to be categorized according to risk classes.*

the share of nonperforming assets during 2003 (particularly in loss loans), further developments need to be monitored closely, in order to see whether 2003 represented a temporary hiccup or the start of a sustained deterioration linked to the increase in the overall volume of more risky assets.

7 Capital Adequacy and Liquidity

The capital adequacy ratio (CAR) of the Bulgarian banking system has gradually fallen over the past several years. Based on the overall capital base it fell from a peak of 41.3% in 1999 to 22.0% by end-2003; based on the primary capital base (~ core capital) it declined from a peak of 30.3% to 14.4% during the same period. Nevertheless, the current ratio is still significantly above the required level of 12% (based on the overall ratio), and both ratios are higher than registered during the pre-crisis years. The decline in the CAR was caused by a stronger increase in the total risk component (~ risk-weighted assets) than in the primary capital base throughout these years. This process has likely been determined by the shift in banking sector assets from less risky lending to the general government and the central bank toward more risky lending to the private sector. Moreover, the high CARs of the years immediately following the financial crisis were affected by banks' extremely risk-adverse behaviour and sub-optimal return on invested funds.

The liquidity position of Bulgarian banks has remained satisfactory over the past few years, with liquid assets accounting for around 20% of total assets. Developments in 2003 were particularly favourable, with the ratio rising to 22.1%, as liquid assets grew more strongly than total assets (27.1% vs. 18.4% year on year). On the other hand, however, the credit-to-deposit ratio increased between 2002 and 2003, reaching 76.5% at the end of 2003 (from slightly above 50% during 1999–2001), reflecting the strong acceleration in credit growth, which exceeded the growth rate of deposits.

Table 10

Capital Adequacy and Liquidity

	1997	1998	1999	2000	2001	2002	2003
	%, end-of-period						
Capital adequacy ratio total	28.9	37.3	41.3	35.5	31.1	25.2	22.2
Capital adequacy ratio primary	21.4	29.7	30.3	24.9	21.6	17.0	14.5
Liquid assets/total assets	. .	. .	27.9	20.5	22.0	24.3	28.8
Credits-to-deposits ratio	34.1	46.4	50.8	51.0	50.4	62.3	76.5
	% of capital base						
Open foreign exchange position	. .	. .	4.6	–5.4	–6.8	–3.8	–4.7

Source: Bulgarian National Bank, OeNB calculations.

8 The Profitability of the Banking System

The profitability of the Bulgarian banking system has remained broadly stable over the past few years. Return on assets in nominal terms hovered between 2% and 3%, while return on equity was roughly between 15% and 20%. Inflation narrowed these values, so that return on assets deflated by consumer price inflation was negative until 2002 and could break even only in 2003. Return on equity in real terms ranged between

8% and 15%, with the value for 2003 (15.1%) being in line with the Central European average. Over the past couple of years net profits have also benefited from a decline in the tax burden. While tax payments had accounted for 34% of gross profits in 1999, the burden had continuously fallen to 22.4% by 2003.

Following a decline between 2000 and 2002, net interest income (in percent of average total assets) improved in 2003, despite a further narrowing of the interest rate spread. This suggests that strong credit expansion and the resulting improvement in the net position of the banking system toward domestic sectors[12], which was accompanied by a deterioration in the net foreign assets position, compensated for the decreasing difference between credit and deposit rates, as the interest rate spread on local currency assets significantly exceeded that on foreign currency assets.

Table 11

Profitability Indicators

	1997	1998	1999	2000	2001	2002	2003
	%						
Net interest income/total assets average	..	4.4	4.6	4.6	4.3	3.9	4.7
Operating income/total assets average	..	4.0	10.3	10.5	7.8	7.1	7.2
Cost income ratio	13.8	140.1	56.7	49.9	64.1	63.5	63.0
Net costs of loan loss provisioning/operating income	57.3	−111.3	6.6	8.6	−8.7	1.3	3.7
Return on assets	..	1.7	2.5	3.1	2.7	1.9	2.0
Return on assets deflated by CPI	..	−14.3	−0.1	−6.6	−4.4	−3.6	−0.3
Return on equity	..	13.0	16.6	19.8	19.2	14.4	15.0
Return on equity deflated by CPI	..	−4.8	13.6	8.6	10.9	8.2	12.4

Source: Bulgarian National Bank, OeNB calculations.

Given the development of net interest income and the relatively worse performance of noninterest revenues, operating income (in percent of total average assets) deteriorated between 1999 and 2002 and stabilized at around 7% in 2003. The share of net interest income in total operating income rose from 45% in 1999 to 65% in 2003. During the same period, operating costs grew more strongly than operating income, leading to a deterioration in the cost-to-income ratio from 56.7% (1999) to 62% (2003).

Loan loss provisioning has contributed to gross profits both positively and negatively since 1999. After large reserves were created in 1999–2000 (6.6% and 8.6% of operating income, respectively), a (net) dissolution of reserves in the magnitude of almost 9% of operating income was recorded in 2001. In 2002 and 2003 additional reserves of around 1% of operating income were first allocated and then dissolved.

9 Austrian Banks in Bulgaria

In December 2003, two large Austrian banking groups were present in Bulgaria, both through 100%-owned subsidiaries. The total volume of assets controlled by these two banking groups amounted to around EUR 1 billion, which gave them a market share of 11.4%.

[12] *Including monetary financial institutions, which inter alia include the Bulgarian central bank.*

Given that only these two Austrian banks are present in the country, subsidiaries in Bulgaria play a rather limited role for the Austrian banking system as a whole. The two Bulgarian subsidiaries account for only 1.5% of the combined weighted[13] assets of Austrian banks' subsidiaries in the CEE region, thus taking 10th place out of 13. Their share in total claims on bank and nonbank customers was modestly higher at 1.8%. Business in Bulgaria, however, is rather profitable, as the two subsidiaries there accounted for 2.0% of combined after-tax earnings of Austrian subsidiaries in the CEE region (place 8). This combination of a weak asset position and a strong return position puts Bulgarian subsidiaries in a comfortable third place among all Austrian subsidiaries in the CEE region in terms of return on assets, following Belarus and the Russian Federation.

10 Capital Markets

According to data provided by the European Central Bank (ECB), the Bulgarian debt securities market amounted to EUR 5.8 billion at the end of 2002, which represented around 35% of 2002 GDP. According to capital market information provided by Bloomberg[14], outstanding debt of Bulgarian issuers amounted to EUR 6.8 billion at the beginning of May 2004. This represented about 38% of 2003 GDP. In any case, this ratio is significantly below the euro area average of 115% of GDP.

Regarding the issuer structure, ECB data reveal that the government was by far the largest issuer, accounting for 99.4% of the total outstanding volume, followed by monetary financial institutions (0.5%) and other corporations (0.1%). According to Bloomberg, the central government accounted for 95.6% of total outstanding debt securities and local governments for 2.9%, while the share of banks and other financial institutions was 1.5%.

Regarding the currency structure, outstanding debt was primarily denominated in currencies other than the Bulgarian lev, which accounted for only 13.5% of total outstanding debt in December 2002. This high share of foreign currencies, and in particular of the U.S. dollar, can be explained by the huge volume of Brady bonds. Also, according to Bloomberg data, about half of the eurobond volume issued in recent years (November 2001 and April 2002) was denominated in U.S. dollars, while the other half was issued in euro. Bloomberg data show that about 15% of the total outstanding volume of debt securities at the beginning of May 2004 was denominated in Bulgarian leva, around 19% in euro and the rest in U.S. dollars. About 17% of the euro-denominated bonds and 4% of the U.S. dollar-denominated bonds and, hence, 7% of all foreign currency-denominated bond volumes were issued on the domestic market, reflecting the importance of foreign currencies in domestic financial transactions.

Regarding the maturity structure, foreign currency debt was almost exclusively long-term, with maturities of over ten years. In contrast, ECB data for the end of 2002 show that only slightly more than half (54.8%) of local currency debt was constituted by long-term bonds (maturity of more

13 *I.e. weighted by the Austrian owner's percentage share in the subsidiary's total equity.*

14 *Bloomberg database.*

than five years), while the rest represented shorter-dated bonds (37.7%) and money market securities. According to Bloomberg, the outstanding volume-weighted average life to maturity amounted to 9.9 years in May 2004. Foreign currency-denominated debt was longer-dated, with an average life to maturity of almost 8 and 12 years for euro and U.S. dollar denominations, respectively, while debt denominated in the local currency had a relatively short maturity of 3.6 years.

Similar to the issuer structure, secondary market trading of outstanding debt has concentrated on government debt (99.7% in 2002). However, overall trading volumes were low, with average daily turnover volumes accounting for only 0.25% of the outstanding total in 2002.

With regard to the investor structure, the government debt market is dominated by domestic private banks. According to data by the Bulgarian central bank from March 31, 2004, domestic banks held 70% of government securities issued domestically for budget deficit financing, which are predominantly denominated in Bulgarian lev. Insurance companies and pension funds held 15%, while other domestic nonbank financial institutions, companies and individuals had a combined share of 13%. Nonresident investors and state-owned banks held less than 1% of the outstanding volume each.

Similarly, private banks, insurance companies and pension funds were the major investors in the so-called ZUNK bonds, which are foreign currency-denominated government securities issued domestically for structural reforms (private banks: 51%, insurance companies and pension funds: 33%). Other domestic nonbank financial institutions, companies and individuals held 14%, state-owned banks 1.7% and nonresidents 0.8% of these securities.

Equity market capitalization amounted to a meagre EUR 200 million on average in 2003, which represented about 1.2% of GDP. Equity market turnover in 2003 was less than EUR 100 million.

11 Summary

After the severe financial crisis of 1996–1997, the Bulgarian banking system has undergone fundamental changes. Over the past few years, the banking system has been almost completely privatized, with foreign investors having gained a dominating position. This has led to a more competitive environment and promoted financial intermediation. The financial sector continues to be dominated by the banking sector, which is also the main investor in domestically issued government securities. While the degree of financial intermediation remains low in Bulgaria compared to the euro area or the five new Central European EU Member States, lending activity has been invigorated over the past few years.

Banking sector assets are increasingly dominated by claims on domestic sectors, with the share of lending to the private sector in total domestic claims having risen at the cost of the share of lending to the general government since 1997. Since 2000, the rise in the share of private sector lending has been exclusively fueled by the markedly increased amount of lending to households. Within domestic claims, credits predominate, while securities and repurchase agreements continue to play a subordinate role.

Parallel to increased domestic lending activity the banking sector's

net external position has deteriorated in recent years, as domestic savings have not kept up with the expansion of lending activity. Foreign currencies have been playing an increasingly important role in domestic lending in Bulgaria since 2000, while the share of foreign currency-denominated deposits in total deposits of nonbanks has declined since 2001. This may be explained by the positive interest rate differential toward the euro area and the concurrent expectations of a stable exchange rate, which signal confidence in the sustainability of the currency board arrangement.

Credit expansion has led to an improvement in the banking sector's net position toward domestic sectors and has compensated for the decreasing difference between credit and deposit rates, keeping banking profitability stable over the past few years. The profitability of Bulgarian banks thus compares well with the Central European average. Despite a decline in the capital adequacy ratio on the back of a stronger increase in risk-weighted assets than in the capital base, Bulgarian banks seem to be well capitalized. Similarly, the share of nonperforming assets has declined significantly since the financial crisis, although strong credit expansion, in particular of credits to households, still warrants close monitoring over the next few years. Overall, in line with the IMF's appraisal of 2002, the Bulgarian banking system may be characterized as "stable, generally well supervised, strongly capitalized, profitable and risk-averse."

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