The Banking Sector of Bosnia and Herzegovina: The Dominant Role of Austrian Banks

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This study analyzes the development of the banking sector of Bosnia and Herzegovina until the end of 2004. After a brief description of the institutional and macroeconomic background, it covers the ownership structure and concentration in the banking sector, the degree of financial intermediation, the structure of the aggregated balance sheet and the role of foreign exchange in the banking sector's balance sheet. Finally, this paper investigates the development of capital adequacy and profitability. The author finds that macroeconomic stabilization (on the back of a currency board arrangement) and the market entry of foreign banks supported the reform process in the banking sector and helped deepen financial intermediation, while leading to a relatively high concentration of banking sector assets. The author argues that the main challenges for the banking sector in Bosnia and Herzegovina are first, to increase (longer-term) lending to nonfinancial corporations; second, to keep its overall net foreign currency position under control amidst the domestic household lending boom; third, to closely monitor the development of asset quality; and fourth, to further improve the banking sector's operational efficiency.

1 Introduction: Institutional and Economic Background

This study[2] focuses on the banking sector of Bosnia and Herzegovina, analyzing in particular the developments from 1997 until the end of 2004.

From 1992 to 1995, Bosnia and Herzegovina was severely affected by the war in Former Yugoslavia. In addition to the serious humanitarian and social consequences of the war, destruction, loss of trade and other economic links, and the forced dispersal of the labor force led to a near-total breakdown of the country's economic system. The huge population displacement, both within the country and abroad (with refugees making up 50% of the total pre-war population), resulted in a fragile and dislocated social situation and a reduced internal market. The collapse of traditional markets and the degree of physical damage to the existing infrastructure led to an estimated fall in GDP per capita to 30% of pre-war levels (European Commission and The World Bank, 2003).

In response to the ethnic and territorial conflicts that arose during the war, the parties participating in the peace negotiations of Dayton in 1995 aimed at formulating a compromise that ensured political stability and a balance of power in the country. Thus, according to the Dayton Peace Agreement (DPA), Bosnia and Herzegovina (BiH) consists of a central authority, an autonomous district (Brčko District) and two autonomous entities, namely the Federation of Bosnia and Herzegovina (FBiH) and the Republika Srpska (RS), which were formed as international protectorates under the supervision of the United Nations (Annex II of the DPA, 1995). Both entities and the district have established and operate their separate legislation and administration authorities and institutions based on the defined conditions of the DPA. In fiscal terms, these entities are autonomous. The state of Bosnia and Herzegovina is the central authority, but has only limited and specific powers like monetary policy (common currency and common central bank), external trade and customs, regulatory competence on telecommunications, the transport system and traffic control,

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[2] *Concerning the reliability of statistical data used in this paper, it should be noted that the high number of statistical offices (at the canton, entity and state levels) and the low level of coordination between them (resulting from the complicated constitutional partition of the country) are highly problematic when it comes to applying a statistical methodology, and therefore require caution on the part of the reader (Pöschl, 2004, 6).*

foreign relations, interentity criminal laws and immigration policies. The entities – which each have their own constitutions – exert all functions not expressly assigned to the central state by the constitution of BiH (European Commission Delegation to BiH, 2003, 10).

Against the background of this formal separation, the entities try to create conditions for social and economic unification in order to support a sustainable social and economic development. Moreover, there are some efforts in progress to enhance economic cooperation not only between the entities within the state, but also with the neighboring countries. At the beginning of July 2003, the governments of both entities agreed on the basic principles for a common economic strategy. The main objectives set in this agreement were to strengthen the private sector, reduce dependence on imports, increase exports, and join the World Trade Organization in 2004 and the EU by 2010. In the course of the Trade Initiative of the Stability Pact for South Eastern Europe, all countries of the region have been setting up bilateral trade agreements. As all the countries in this region form a geographic and strategic unit in the perception of foreign investors, the liberalization of trade should attract further FDI. In this regard, country-specific competitiveness will play an important role as well (Marinovic, 2004, 3).

Regarding its main economic developments, Bosnia and Herzegovina experienced high GDP growth rates during the first years after the war (1996–99), albeit starting from a very low base level. After a slowdown from 10% in 1999 to 5.5% in 2000, real GDP growth in BiH settled down to an average of around 5% per annum in the period from 2000 to 2004 – this figure was not inflationary, but combined with a significant external imbalance.

Excluding the estimate for the unobserved economy, GDP per capita in BiH remained below the weighted average GDP per capita in the Western Balkans[3] (excluding Croatia), both calculated on the basis of the exchange rate and at purchasing power parity (PPP), throughout the period from 2000 to 2004. GDP per capita was far lower than in Bulgaria, Romania and Croatia (see table 1).

By contrast, in 2004, the average monthly gross wage level in BiH amounted to more than EUR 380, thus considerably exceeding average levels in Bulgaria (EUR 149) and Romania (EUR 204) (Pöschl, 2005, 89).

[3] *Western Balkans as defined by the European Commission: Albania, Bosnia and Herzegovina, Croatia, FYR of Macedonia, Serbia and Montenegro with Kosovo.*

Table 1

Gross Domestic Product: Real Growth and Per Capita Income Level in Comparison

	1997	1998	1999	2000	2001	2002	2003 (c)	2004 (d)
Real GDP growth (year on year, %) (a)	. .	. .	10.0	5.5	4.5	5.5	3.0	5.0
GDP per capita (EUR at exchange rate), excluding estimate for the unobserved economy (b)	. .	. .	1,234	1,359	1,476	1,556	1,642	1,732
GDP per capita (EUR at exchange rate), including estimate for the unobserved economy (b)	. .	. .	. .	. .	. .	. .	2,262	2,387
For comparison: GDP per capita (EUR at exchange rate) in								
Western Balkan countries (excluding Croatia), average (b)	. .	. .	. .	2,136	1,566	1,830	1,966	2,121
Croatia (b)	. .	. .	. .	4,505	4,998	5,449	5,749	6,224
Bulgaria and Romania, average (b)	. .	. .	. .	1,764	1,982	2,191	2,300	2,604
GDP per capita (EUR at PPP), excluding estimate for the unobserved economy (b)	. .	. .	3,270	3,507	3,719	3,978	4,133	4,439
GDP per capita (EUR at PPP), including estimate for the unobserved economy (b)	. .	. .	. .	. .	. .	. .	5,694	6,118
For comparison: GDP per capita (EUR at PPP) in								
Western Balkan countries (excluding Croatia), average (b)	. .	. .	. .	3,940	4,264	4,580	4,760	5,122
Croatia (b)	. .	. .	. .	8,107	8,642	9,303	9,723	10,396
Bulgaria and Romania, average (b)	. .	. .	. .	5,095	5,567	6,073	6,326	6,943
EU-15, average (b)	. .	. .	. .	21,639	22,419	23,172	23,321	24,251

Source: (a) CBBH (2005a); (b) OeNB calculation based on CBBH (2005a) and Pöschl (2005) (Western Balkan average excludes estimate for the unobserved economy in BiH); (3) revised data; (4) preliminary data.

The registered unemployment rate was above 40% in 2003 and 2004. Taking into consideration employment in the shadow economy, the Central Bank of Bosnia and Herzegovina (Centralna banka Bosne i Hercegovine – CBBH) estimated the unemployment rate at around 20% in 2003 (Bergkvist, 2004, 52).

In 2004, the current account deficit amounted to 23.3% of GDP, after it had risen significantly in the period from 2000 to 2003. At least the deficit did not deteriorate further in 2004. The source of the high current account deficit was the very high trade deficit, which amounted to 55.4% of GDP in 2004. This means that exports covered less than one-third of imports. While the trade deficit-to-GDP ratio remained stable from 2000 to 2003 and improved in 2004, the surplus on both the income balance and the current transfers balance declined significantly, which implied a considerable increase in the current account deficit (see table 2).

The main sources of financing the current account deficit in the period from 2001 to 2004 were other investment net inflows, followed by the surplus in the capital account and gradually increasing net FDI inflows. Together with a positive net errors and omissions position, these items have even caused a significant buildup of gross official reserves in recent years.

Table 2

Balance of Payments Items

	1997	1998	1999	2000	2001	2002	2003	2004
	BAM million							
Trade balance	. .	–5,482	–6,052	–5,868	–6,470	–6,892	–7,180	–7,192
Trade balance as a percentage of GDP	. .	*–72.5*	*–67.3*	*–58.4*	*–59.0*	*–59.2*	*–58.4*	*–55.4*
Services balance	. .	309	298	323	432	386	460	584
Income balance	. .	1,424	1,309	1,225	1,177	1,057	921	703
Current transfers balance	. .	3,097	3,441	3,338	3,095	2,869	2,788	2,884
Current account balance	. .	–653	–1,004	–983	–1,766	–2,579	–3,011	–3,021
Current account balance as a percentage of GDP	. .	*–8.6*	*–11.2*	*–9.8*	*–16.1*	*–22.1*	*–24.5*	*–23.3*
Capital account balance	. .	871	1,148	1,160	866	849	799	775
Financial account balance (excluding change in reserve assets)	. .	–314	363	–289	2,314	1,372	1,973	2,047
of which: direct investment, net	. .	*117*	*325*	*310*	*260*	*551*	*660*	*783*
portfolio investment, net	. .	*0*	*0*	*0*	*0*	*0*	*0*	*0*
other investment, net	. .	*–431*	*38*	*–599*	*2,054*	*821*	*1,313*	*1,264*
Net errors and omissions	. .	243	81	276	251	114	555	876
Reserve assets (+ = decrease of gross official reserves excluding gold)	. .	–148	–588	–165	–1,665	245	–316	–677

Source: CBBH (2005a), OeNB calculations.

Annual inflation has been at very low levels since 1998 in the FBiH and since 2001 in the RS, where a pronounced deflation took place in 1997. Since 2002, annual average inflation in BiH has been below 1% (see table 3).

Table 3

Retail Price Index

	1997	1998	1999	2000	2001	2002	2003	2004
	Year-on-year change in %							
Federation of Bosnia and Herzegovina, December (a)	13.6	1.8	–1.0	4.0	2.4	0.7	–0.3	–0.3 (d)
Republika Srpska, December (a)	–10.0	5.6	14.0	16.0	2.5	2.4	0.2	2.2 (d)
Bosnia and Herzegovina, December (b)	7.6	2.8	3.3	7.5	2.4	1.2	–0.2	0.5 (d)
Federation of Bosnia and Herzegovina, annual average (a)	. .	. .	–0.9	1.2	1.7	–0.2	0.1	–0.3
Republika Srpska, annual average (a)	. .	. .	15.1	13.6	6.5	1.7	1.8	1.9
Bosnia and Herzegovina, annual average (c)	. .	13.3	3.7	4.8	3.1	0.4	0.6	0.4

Source: (a) EBRD (2004); (b) OeNB calculation based on EBRD data; (c) CBBH (2005a); preliminary weighted data for 2004. Weights used represent FBiH and RS shares in BiH GDP for 2003. (d) CBBH (2005b).

This impressive disinflation process came on the back of the efforts initiated by the institutional monetary policy arrangement. The CBBH was established under the DPA and commenced its operations on August 11, 1997. As mentioned before, the CBBH is a federal-level institution, which means it is the only monetary authority in BiH. It operates throughout the country with five offices (Chamber of Economy of Federation of Bosnia and Herzegovina, 2004). The most important aim of the CBBH is to formulate, adopt and control the monetary policy of BiH. Monetary policy is conducted through strict adherence to the currency board arrangement (CBA), as stipulated in the CBBH law and in the DPA (Kovačević, 2004, 59).

The choice of a currency board had two main motivations. First, the currency board should provide a firm nominal anchor in the form of a fixed exchange rate, which was considered crucial in the economically very uncertain post-war situation. Second, a strictly rule-based approach to monetary policy was seen as the most appropriate, taking into account the difficulty in making political decisions in the country's complex institutional and political environment (Kovačević, 2004, 59).

There are three essential features of the CBA in BiH, all of which are specified in the CBBH law:

First, the exchange rate of the national currency, i.e. the Bosnian convertible mark (BAM), was pegged to the Deutsche mark (DEM) at a fixed rate of 1:1. This exchange rate made the parallel use of the two currencies easier during the period in which citizens were building up their trust in the new national currency. When the euro was introduced in January 1999, the convertible mark was tied to the euro at the same parity as the Deutsche mark (1.95583 BAM per EUR). Second, the domestic currency liabilities of the CBBH have to be fully backed with convertible foreign assets (Kovačević, 2004, 59). According to the CBBH balance sheet, BAM liabilities came to 3,284 million and foreign assets to BAM 3,458 million at the end of 2004, so there was more than 100% coverage (Centralna banka Bosne i Hercegovine, 2005a). Third, full convertibility of the currency was implemented, which means that the CBBH had to be prepared to exchange BAM for DEM (EUR) at any time and in any amount (Kovačević, 2004, 60).

The main discretionary monetary policy tool available in the CBA is the minimum reserve requirement rate. In BiH this rate was reduced from 10% to 5% in mid-2003 and raised again to 10% in 2004. In mid-2003, the base for the required reserve was expanded to include foreign exchange deposits in addition to BAM deposits (Ljubiša, 2003). The reserve requirement rate had been introduced in 1998 with a minimum of 10% and a statutory maximum of 15%, with both rates applying for commercial banks' total BAM deposits (Centralna banka Bosne i Hercegovine, 1999, 14). Later in September 2002, the upper limit had been raised to 20% (Centralna banka Bosne i Hercegovine, 2003, 22).

Against this institutional and economic background, this paper analyzes the development of the banking sector in Bosnia and Herzegovina. The structure of the paper is as follows: Section 2 provides a description of the general situation in the Bosnian and Herzegovinian banking sector, including the privatization process, the banking capital and ownership structure, the distribution of market shares and the degree of financial intermediation. Section 3 analyzes commercial banks' balance sheets on an aggregated level, split up into the assets and liabilities sides. Section 4 comments on the role of foreign exchange in banking activity. Section 5 shows the capital adequacy and liquidity indicators of the banking sector in BiH, section 6 analyzes the profitability of banks and section 7 concludes.

2 The Banking Sector: Current Situation and Main Features

After the implementation of the new monetary policy by the CBBH in 1997 and the market entry of foreign banks, the financial sector – in which the banking sector dominates – experienced a stabilization and consolidation process.

On behalf of the Council of Ministers and the Ministry of Foreign Trade and Economic Relations, the Office of the BiH Coordinator for Poverty Reduction Strategies released its mid-term development and poverty reduction strategy paper in March 2004. The strategy paper analyzes the current situation in the banking sector and concludes that the banking system has achieved the most evident progress among all the sectors in BiH. In addition, banking sector results in the FBiH have been notably better than in the RS. Listing up all the important achievements, the paper describes the privatization process of the banking system as almost fully completed and the regulatory framework as having successfully been put in place. Furthermore, it states that the number of banks has been reduced, that foreign banks are present and that interest rates are falling. It highlights that confidence in banks has strengthened, that a deposit insurance system has been established and that the level of savings has increased. Last but not least, sufficient banking supervision instruments have been developed and are continuously being improved (Council of Ministers et al., 2004, 92).

In its Information on the Banking System 2003, the Banking Agency of the Federation of Bosnia and Herzegovina reported that the first phase of reform of the BiH banking system had come to an end. Concerning the current situation, the Banking Agency described the system as being stable, transparent and profitable (Banking Agency of the Federation of Bosnia and Herzegovina, 2004, 4).

In its report on the banking sector the Chamber of Economy states, “Bosnia Herzegovina has an improving commercial banking sector. The reform in the banking sector has gone further and faster than reform in any other sector of the economy. Confidence is coming back and depositors are now prepared to put their savings in the banks rather than keep them at home in foreign cash” (Chamber of Economy of Federation of Bosnia and Herzegovina, 2004, 1).

The EBRD has developed a transition indicator for banking sector reform as an important international source of assessment. This indicator ranges from 1 to 4+, with 1 defined as little progress in financial sector reform and 4+ representing full convergence of banking laws and regulations with BIS standards and a full set of banking services. According to this indicator, BiH was rated 2+ in 2003, which is interpreted as being a typical value for this region (SEE[4] average: 2.75) (Falcetti et al., 2004, 23).

2.1 Bank Privatization

In both legal entities of BiH, bank privatization was conducted in accordance with special laws. Thus, banks could not be privatized against certificates or vouchers, but only against cash investment that was selected via international tenders.

[4] *Southeastern Europe (SEE) as defined in the EBRD Transition report: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, FYR of Macedonia, Moldova, Romania, Serbia and Montenegro with Kosovo.*

In the Republika Srpska, the capital of 11 banks that were majority state-owned was offered for sale during the privatization period. By 2003, nine banks had been sold or merged with other banks and two had been closed. Given the poor situation in the banking sector, total realized income came to no more than BAM 7.4 million.

In the FBiH, there were separate processes for the privatization of those banks that were majority state-owned and those banks in which the FBiH held minor stakes. Most state-owned banks have been successfully privatized by now, and the remaining ones have already been offered for sale (Council of Ministers et al., 2004, 81).

However, it has to be highlighted that the consolidation process of the banking sector came mainly on the back of foreign direct investment through the acquisition of private – or already privatized – banks. Therefore, while significant foreign direct investment in the banking sector was made, state revenues from bank privatization were less than BAM 20 million by end-2003 (Council of Ministers et al., 2004, 81). In addition to the acquisition of existing banks, foreign strategic investors undertook sizeable greenfield investments in the banking sector.

2.2 Banking Capital and Ownership Structure

At the end of 2004, private banking institutions accounted for 86% of total banking capital in BiH, with the share of foreign private capital in total capital coming to 67%. Thus, the share of foreign capital in private capital was 78% (see table 4). The share of state capital in total banking capital increased somewhat in 2004 as a result of the recapitalization of the Investment Bank of the FBiH by the government of the FBiH (Centralna banka Bosne i Hercegovine, 2005c).

The total banking capital-to-GDP ratio came to 8.5% at end-2004 compared with 7.1% at end-2002, while it was 5.1% in SEE and 5.3% in the NMS-5[5] (Falcetti et al., 2004, 23), respectively.

Table 4

Structure of Banking Capital

	1997	1998	1999	2000	2001	2002	2003	2004
	End of period							
Total banking capital (BAM million)	. .	. .	. .	684	700	831	933	1,102
Private capital as a percentage of total capital	. .	. .	. .	. .	. .	90	90	86
State capital as a percentage of total capital	. .	. .	. .	. .	. .	10	10	14
Foreign private capital as a percentage of total capital	. .	. .	. .	. .	. .	66	70	67
Banking capital as a percentage of GDP (BiH average)	. .	. .	. .	6.8	6.4	7.1	7.6	8.5

Source: CBBH (2005c, data for 2004), Banking Agency of the FBiH (2004), Banking Agency of the RS (2004), OeNB calculations.

[5] *NMS-5: Czech Republic, Hungary, Slovakia, Slovenia, Poland.*

2.3 Market Leadership and Concentration

At end-2004, 33 banks were operating in Bosnia and Herzegovina. Due to privatization and consolidation, this figure had gone down significantly since end-1999 (see table 5).

At end-2002, when 42 banks were operating in the country, the number of banks per 100,000 inhabitants was 1.05, which was higher than the corresponding average figure in SEE (0.45), in the NMS-8[6] (0.30) or in the euro area (0.54) (Falcetti et al., 2004, 23).[7]

Table 5

Number of Banks Operating in Bosnia and Herzegovina

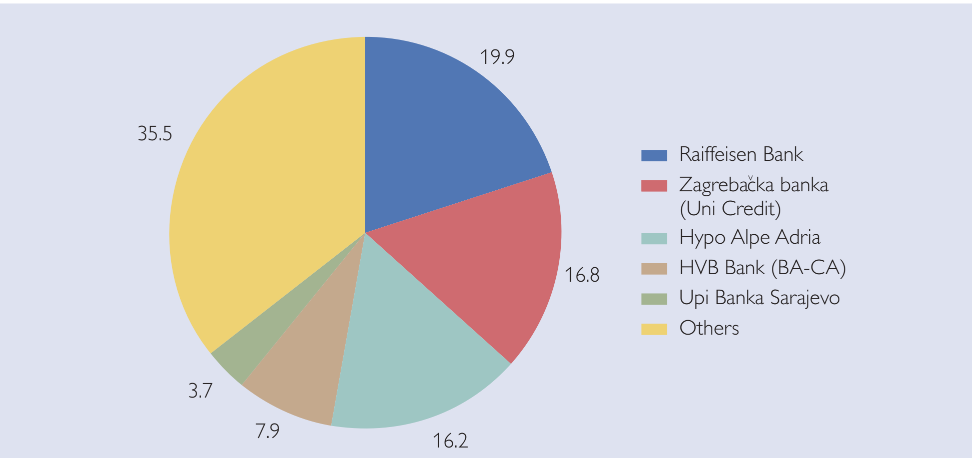
	1997	1998	1999	2000	2001	2002	2003	2004
Federation of Bosnia and Herzegovina	. .	. .	44	37	32	31	27	24
Republika Srpska	. .	. .	17	18	16	11	10	9
Bosnia and Herzegovina	. .	. .	61	55	48	42	37	33

Source: CBBH (2005c), Banking Agency of the FBiH (2004), Banking Agency of the RS (2004).

The five largest banks in BiH accounted for more than 64% of total banking assets at end-2003. Three of these five banks were direct subsidiaries of Austrian banks. The banking assets of the biggest bank in BiH, the Austrian Raiffeisen banka dd Bosna i Hercegovina, accounted for nearly 20% of total banking assets and the two largest banks, Raiffeisen banka dd Bosna i Hercegovina and Zagrebačka banka BH (both in foreign ownership), together accounted for about 36% of total banking assets in BiH at end-2003. These ratios point to a high degree of concentration in the banking sector (see chart 1).

Chart 1

Market Share as a Percentage of Total Assets



Source: RZB Group Research (2004).

[6] *NMS-8: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia.*

[7] *It should be noted, however, that this indicator is based not on the number of branches but on the number of banking institutions operating in the market.*

Moreover, according to the same calculation, concentration in the banking sector in BiH was even slightly stronger than the average banking concentration in the SEE countries, where the five largest banks accounted for less than 60% of total assets at the end of 2002 (Falcetti et al., 2004, 23).

2.4 Degree of Financial Intermediation

Financial intermediation in BiH is almost entirely conducted through the banking system, while insurances and nonmonetary financial institutions play a minor role in the financial sector (Council of Ministers et al., 2004, 92). Financial intermediation – measured by the ratio of domestic claims to GDP, both for the whole economy and for the private sector, as well as by the ratio of total banking assets to GDP – decreased until 2000, but then went up significantly until the end of 2004, to a level considerably above that of end-1997 (see table 6).

The degree of financial intermediation as measured by total assets to GDP was higher in BiH than in SEE on average at end-2002 (46.5%) (Falcetti et al., 2004, 23), but lower than the NMS-10[8] average at the end of 2003 (81.0%) (Oesterreichische Nationalbank, 2004).

Table 6

Domestic Credit and Total Banking Assets as Indicators of Financial Intermediation

	1997	1998	1999	2000	2001	2002	2003	2004
	% of GDP							
Domestic claims on the private sector	37.7	37.1	30.5	29.7	30.2	36.2	41.3	45.3
Domestic claims	39.9	38.6	30.9	30.0	30.5	36.7	41.6	45.7
Total banking assets (BiH)	54.6	49.4	43.4	42.4	50.9	54.5	62.5	72.4

Source: CBBH (2005a), OeNB calculations.

[8] *NMS-10: NMS-8 plus Malta and Cyprus.*

3 Structure of Commercial Banks' Aggregated Balance Sheets

3.1 Asset Side

3.1.1 Amount of Assets

The amount of the banking sector's total assets[9] almost doubled in the period between end-2000 and end-2003. At the end of 2003, total banking sector assets amounted to BAM 7.8 billion and grew further to BAM 9.4 billion by end-2004. In 2003, FBiH banks accounted for 82.6% and RS banks for 17.4% of total banking assets in BiH.

Total domestic claims[10] made up 63.1% of total banking assets at the end of 2004. In 2001, the share of domestic claims in total banking assets declined sharply, although domestic claims continued to grow strongly in real terms. This development resulted from the jump in the total reserves and foreign assets positions in 2001, which, in turn, was mainly attributable to an increase in the volume of domestic deposits, in particular foreign currency-denominated deposits. The larger volume of domestic funding did not immediately lead to increased lending activity. Rather, in a first instance, these funds were partly redeposited abroad and partly held as additional liquid assets. However, in 2002, the high level of liquidity provided the basis for an expansion of domestic lending, which implied a corrective change in the shares of the three components of banking assets. From end-2002 to end-2004, all three components of banking assets increased significantly, implying rising ratios to GDP. However, the growth of reserves outpaced that of domestic claims and foreign assets, implying declining shares of those two components in total banking assets. At the end of 2004, the relatively high share of reserves, coupled with a credit-to-deposit ratio of 106%, indicated a favorable liquidity situation of the banking sector.

In addition to higher funding volumes, the improving financial solvency and liquidity of debtors may be considered a supporting factor that drove the strong growth of domestic claims, as it improved the opportunities to place the additional funds (see table 7).

[9] *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 of the banking sector (i.e. excluding the central bank) on the central bank. In principle, total banking sector liabilities also comprise – inter alia – liabilities of the banking sector (i.e. excluding the central bank) to the central bank. However, as a result of the currency board arrangement, the central bank does not perform any refinancing function for the banking sector. It should be noted that domestic interbank claims/liabilities are included neither on the asset side nor on the liability side.*

[10] *Please note that in this paper domestic claims do not include domestic claims on other monetary financial institutions (including the central bank).*

Table 7

Structure of Banking Assets in Bosnia and Herzegovina

	1997	1998	1999	2000	2001	2002	2003	2004
	End of period							
Banking assets (BAM million)								
Domestic claims	2,440	2,921	2,781	3,017	3,339	4,281	5,122	5,927
Foreign assets	659	605	848	961	1,364	1,469	1,562	1,906
Reserves	240	208	275	287	872	595	1,005	1,567
Total banking assets (on balance)	3,337	3,733	3,904	4,265	5,575	6,345	7,688	9,400
Structure as a percentage of total banking assets (on balance)								
Domestic claims	73.1	78.2	71.2	70.7	59.9	67.5	66.6	63.1
Foreign assets	19.7	16.2	21.7	22.5	24.5	23.2	20.3	20.3
Reserves	7.2	5.6	7.0	6.7	15.6	9.4	13.1	16.7
Total banking assets (on balance)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: CBBH (2005a), OeNB calculations.

Note: Domestic claims do not include domestic claims on other monetary financial institutions (including the central bank).

3.1.2 Structure of Claims against Domestic Sectors

Total domestic claims are dominated by two components – claims on households (and others) and claims on nonfinancial corporations – while claims on the general government play a negligible role. Claims on households have continuously gained in weight since end-1997, while the share of claims on nonfinancial corporations in total domestic claims has fallen considerably. However, at end-2004, nonfinancial corporations were still the most important group of debtors to the banking sector. Within the claims on nonfinancial corporations, the share of claims on private companies has risen significantly since the end of 2000. It is unclear whether this uptrend resulted exclusively from the regrouping of companies as a result of privatization (see table 8).

The lack of appropriate insolvency regulations and well-functioning real estate markets that enable banks to provide collateral-backed credits may help explain the low expansion of credit to nonfinancial corporations (Pöschl, 2005, 91).

In BiH, domestic claims of the banking sector nearly exclusively consist of domestic credits (loans), while other claims like securities and repurchase agreements still play a negligible role.

Table 8

Structure of Domestic Claims

	1997	1998	1999	2000	2001	2002	2003	2004
	BAM million							
Domestic claims								
Domestic claims on the general government	134	113	37	34	33	61	46	46
Domestic claims on nonmonetary financial institutions	8	5	6	11	20	28	40	60
Domestic claims on households and others	164	388	285	424	713	1,496	2,009	2,651
Domestic claims on nonfinancial corporations	2,134	2,414	2,453	2,548	2,574	2,697	3,026	3,170
of which: domestic claims on public nonfinancial corporations	*1,099*	*1,100*	*1,003*	*1,673*	*1,431*	*1,255*	*1,167*	*692*
domestic claims on private nonfinancial corporations	*1,035*	*1,314*	*1,449*	*875*	*1,143*	*1,442*	*1,860*	*2,478*
Total domestic claims	2,440	2,921	2,781	3,017	3,339	4,281	5,122	5,927
	As a percentage of total domestic claims							
Structure								
Domestic claims on the general government	5.5	3.9	1.3	1.1	1.0	1.4	0.9	0.8
Domestic claims on nonmonetary financial institutions	0.3	0.2	0.2	0.4	0.6	0.6	0.8	1.0
Domestic claims on households and others	6.7	13.3	10.3	14.1	21.3	34.9	39.2	44.7
Domestic claims on nonfinancial corporations	87.5	82.7	88.2	84.5	77.1	63.0	59.1	53.5
of which: domestic claims on public nonfinancial corporations	*45.0*	*37.7*	*36.1*	*55.5*	*42.9*	*29.3*	*22.8*	*11.7*
domestic claims on private nonfinancial corporations	*42.4*	*45.0*	*52.1*	*29.0*	*34.2*	*33.7*	*36.3*	*41.8*
Total domestic claims	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Domestic claims as a percentage of total banking assets	73.1	78.2	71.2	70.7	59.9	67.5	66.6	63.1
Domestic claims as a percentage of GDP	39.9	38.6	30.9	30.0	30.5	36.7	41.6	45.7

Source: CBBH (2005a), OeNB calculations.

Note: Domestic claims do not include domestic claims on other monetary financial institutions (including the central bank).

3.1.3 Asset Quality

From end-2001 to end-2004, the share of classified assets, i.e. the sum of watch assets and nonperforming assets, in total assets under classification went down, primarily owing to the decreasing share of nonperforming assets. The share of watch assets, by contrast, declined only marginally. Within nonperforming assets, the shares of all three subcomponents (substandard, doubtful and loss assets) decreased.

At end-2004, the share of nonperforming assets in total assets under classification amounted to 3.5%, compared with 8.7% at the end of 2001.

Although the ratio of reserves and provisions to total assets under classification declined from 2001 to 2004, the ratio of reserves and provisions to nonperforming loans climbed to 96.1% at the end of 2004 from 62.0% at end-2001 (see table 9).

All these trends indicate that asset quality improved in the three years from end-2001 to end-2004 despite the strong increase in total domestic claims in this period and the resulting deepening of financial intermediation as measured by the ratio of total domestic claims to GDP. However, the sharply rising share of household credit in total domestic credit could lead to a weakening of asset quality in the future.

Table 9

Asset Quality in Bosnia and Herzegovina

	1997	1998	1999	2000	2001	2002	2003	2004
	End of period, BAM million							
Asset positions and reserves and provisions								
Total assets under classification (on and off balance)	. .	. .	. .	. .	4,987	6,341	7,743	10,234
Standard assets	. .	. .	. .	. .	4,115	5,401	6,737	9,004
Watch assets	. .	. .	. .	. .	438	555	631	871
Nonperforming assets	. .	. .	. .	. .	434	385	376	359
of which: substandard assets	. .	. .	. .	. .	*206*	*190*	*188*	*165*
doubtful assets	. .	. .	. .	. .	*218*	*183*	*180*	*188*
loss assets	. .	. .	. .	. .	*10*	*12*	*8*	*5*
Classified assets	. .	. .	. .	. .	872	940	1,007	1,229
Reserves and provisions	. .	. .	. .	. .	269	289	299	345
	End of period, % (unless otherwise indicated)							
Share in total assets under classification								
Total assets under classification (on and off balance)	. .	. .	. .	. .	100.0	100.0	100.0	100.0
Standard assets	. .	. .	. .	. .	82.5	85.2	87.0	88.0
Watch assets	. .	. .	. .	. .	8.8	8.8	8.1	8.5
Nonperforming assets	. .	. .	. .	. .	8.7	6.1	4.9	3.5
of which: substandard assets	. .	. .	. .	. .	*4.1*	*3.0*	*2.4*	*1.6*
doubtful assets	. .	. .	. .	. .	*4.4*	*2.9*	*2.3*	*1.8*
loss assets	. .	. .	. .	. .	*0.2*	*0.2*	*0.1*	*0.0*
Classified assets	. .	. .	. .	. .	17.5	14.8	13.0	12.0
Reserves and provisions	. .	. .	. .	. .	5.4	4.6	3.9	3.4
Reserves and provisions as a percentage of nonperforming assets	. .	. .	. .	. .	62.0	75.1	79.4	96.1
Reserves and provisions as a percentage of doubtful and loss assets	. .	. .	. .	. .	118.0	148.2	158.5	178.2

Source: CBBH (2003), CBBH (2004), OeNB calculations.

3.2 Liability Side

3.2.1 Amount of Liabilities

Foreign liabilities were the main component of total liabilities in 1997. However, their share in total liabilities declined continuously until the end of 2000. In 2001, it fell markedly as a result of the sharp increase in domestic (foreign currency-denominated) deposits. Thereafter, it increased moderately, but dropped again in 2004 and remained far below the level registered in 2000.

The share of total domestic deposits in total banking liabilities increased moderately from 41% in 1997 to 46% in 2000. In 2001, it jumped to 59%, which is mainly attributable to the depositing of constituent currencies of the euro in the run-up to the cash changeover at the end of 2001.[11] Importantly, the share of domestic deposits in total liabilities remained relatively stable from then on until the end of 2004. The fact that a substantial part of the foreign currency deposits that were converted into euro continued to be kept with banks may be seen as a signal of increased confidence in the banking sector.

The share of capital and reserves showed a downtrend up to the end of 2004 (see table 10). Debt securities issued by banks and restricted deposits were unimportant components of banks' liabilities.

[11] *See Reininger and Walko (2005) for a similar finding on the development of the Croatian banking sector.*

Table 10

Structure of Banking Liabilities in Bosnia and Herzegovina

	1997	1998	1999	2000	2001	2002	2003	2004
	End of period, BAM million							
Banking liabilities								
Domestic deposits	1,194	1,482	1,820	1,954	3,271	3,724	4,366	5,578
Foreign liabilities	1,514	1,606	1,519	1,577	1,527	1,794	2,437	2,651
Capital and reserves	1,043	1,311	1,257	1,096	1,119	1,214	1,305	1,472
Other liabilities	–414	–666	–692	–362	–341	–386	–420	–302
Total banking liabilities (on balance)	3,337	3,733	3,904	4,265	5,575	6,345	7,688	9,400
	End of period, %							
Percentage structure of total banking liabilities (on balance)								
Domestic deposits	35.8	39.7	46.6	45.8	58.7	58.7	56.8	59.3
Foreign liabilities	45.4	43.0	38.9	37.0	27.4	28.3	31.7	28.2
Capital reserves	31.3	35.1	32.2	25.7	20.1	19.1	17.0	15.7
Other liabilities	–12.4	–17.8	–17.7	–8.5	–6.1	–6.1	–5.5	–3.2
Total banking liabilities (on balance)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: CBBH (2005a), OeNB calculations.

3.2.2 Structure of Domestic Deposits

The share of nonfinancial corporations' deposits in total domestic deposits declined from 48.5% at end-1999 to 33.1% at the end of 2001, while the share of household deposits in total domestic deposits surpassed this figure, increasing from end-1997 until end-2001. At that point in time, household deposits began to dominate the structure of domestic deposits, making up 48.6% of total deposits. From end-2001 to end-2004, the relative importance of corporate deposits and household deposits did not change significantly. The share of general government deposits has remained rather stable at about 15% since the end of 1999 (see table 11).

Table 11

Structure of Domestic Deposits

	1997	1998	1999	2000	2001	2002	2003	2004
	BAM million							
Domestic deposits								
Deposits by the general government	394	330	274	278	506	619	784	876
Deposits by nonmonetary financial institutions	29	37	63	65	92	160	189	213
Deposits by households and others	364	544	599	752	1,589	1,761	2,063	2,654
Deposits by nonfinancial corporations	596	751	884	858	1,084	1,183	1,331	1,836
of which: domestic deposits by public nonfinancial corporations	*245*	*274*	*329*	*377*	*393*	*456*	*629*	*843*
domestic deposits by private nonfinancial corporations	*350*	*477*	*554*	*481*	*691*	*727*	*702*	*993*
Total domestic deposits	1,382	1,662	1,820	1,954	3,271	3,724	4,366	5,579
	End of period, %							
Percentage structure of total domestic deposits								
Deposits by the general government	28.5	19.9	15.1	14.2	15.5	16.6	18.0	15.7
Deposits by nonmonetary financial institutions	2.1	2.2	3.5	3.3	2.8	4.3	4.3	3.8
Deposits by households and others	26.3	32.7	32.9	38.5	48.6	47.3	47.2	47.6
Deposits by nonfinancial corporations	43.1	45.2	48.5	43.9	33.1	31.8	30.5	32.9
of which: domestic deposits by public nonfinancial corporations	*17.8*	*16.5*	*18.1*	*19.3*	*12.0*	*12.2*	*14.4*	*15.1*
domestic deposits by private nonfinancial corporations	*25.3*	*28.7*	*30.5*	*24.6*	*21.1*	*19.5*	*16.1*	*17.8*
Total domestic deposits	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: CBBH (2005a), OeNB calculations.

Note: At end-1997 and end-1998, the absolute sum of domestic deposits disaggregated by sectors, as shown in this table, was not fully consistent with the sum total of domestic deposits according to the analytical accounts of the banking sector, which is given in the previous table.

3.3 Net Positions of the Banking Sector

Within the net position the banking sector holds against domestic sectors (defined as domestic claims less domestic deposits), the net position against the general government and that against households have continuously been negative since 1997. The negative net position against the general government (relative to total liabilities) has been rather stable since the end of 2001. By contrast, the negative net position against households increased significantly up to end-2001 (as a result of strong deposit growth), but had nearly vanished by the end of 2004. The latter development reflects the very dynamic growth of lending to households, which exceeded further deposit growth.

The net position against nonfinancial corporations remained positive throughout the period from 1997 to 2004. However, relative to total assets, the net position against nonfinancial corporations significantly decreased in this period, as new bank lending to nonfinancial corporations was roughly covered by new deposits of this sector. In particular, the relatively stable share in total domestic deposits and the further declining share in total domestic claims since the end of 2001 caused the net position to further decrease relative to total assets.

The overall net position of the banking sector against all domestic sectors has been positive since 1997. However, a sharp drop occurred in 2001, when the net position against households became most negative within the period between 1997 and 2004 as euro constituent currencies were deposited with banks in the run-up to the cash changeover at the end of 2001, as mentioned above. These developments created the basis for strong lending growth. The ensuing higher lending activity was directed in particular at households, with household lending growth far outpacing further household deposit growth and thus requiring additional funding. From end-2002 to end-2004, the intensifying domestic lending activity was funded by larger government deposits and higher foreign liabilities. In 2004, this development was complemented by the fact that corporate deposit growth outpaced the growth of corporate borrowing. Thus, the negative net position against households improved, coming close to zero by end-2004.

The net foreign asset position of the banking sector has been negative since 1997. As a result of the upward jump in deposits and the ensuing redepositing abroad of (foreign currency-denominated) deposits, the net foreign asset position showed the least negative value by far of the entire observation period at the end of 2001. After that, however, it widened substantially in absolute terms until end-2003, as this position served to finance the further expansion of domestic credit, in particular to households.

Relative to total liabilities, the decline in the negative net position against households from end-2001 to end-2004 was facilitated by the decline in the positive net position against nonfinancial corporations, which helped contain the increase in the ratio of net foreign liabilities to total liabilities so that this ratio did not reach or surpass the levels of the period from 1997 to 2000 (see table 12).

Table 12

Net Positions against Domestic Sectors and Nonresidents

	1997	1998	1999	2000	2001	2002	2003	2004
	BAM million							
Net positions								
Net position against the general government	–261	–217	–237	–244	–473	–559	–738	–830
Net position against nonmonetary financial institutions	–20	–32	–57	–54	–72	–132	–149	–152
Net position against households and others	–200	–156	–313	–328	–876	–266	–53	–3
Net position against nonfinancial corporations	1,538	1,663	1,569	1,690	1,490	1,513	1,696	1,334
of which: net position against public nonfinancial corporations	*854*	*826*	*674*	*1,296*	*1,037*	*799*	*538*	*–151*
net position against private nonfinancial corporations	*685*	*837*	*895*	*394*	*452*	*715*	*1,158*	*1,485*
Total net position against domestic sectors excluding MFIs	1,077	1,290	1,018	1,118	140	689	904	501
Net foreign assets	–855	–1,001	–671	–616	–163	–325	–875	–745
	%							
Net positions (as a percentage of total assets/liabilities)								
Net position against the general government	–7.8	–5.8	–6.1	–5.7	–8.5	–8.8	–9.6	–8.8
Net position against nonmonetary financial institutions	–0.6	–0.9	–1.5	–1.3	–1.3	–2.1	–1.9	–1.6
Net position against households and others	–6.0	–4.2	–8.0	–7.7	–15.7	–4.2	–0.7	0.0
Net position against nonfinancial corporations	46.1	44.6	40.2	39.6	26.7	23.9	22.1	14.2
of which: net position against public nonfinancial corporations	*25.6*	*22.1*	*17.3*	*30.4*	*18.6*	*12.6*	*7.0*	*–1.6*
net position against private nonfinancial corporations	*20.5*	*22.4*	*22.9*	*9.2*	*8.1*	*11.3*	*15.1*	*15.8*
Net position against domestic sectors excluding MFIs	32.3	34.6	26.1	26.2	2.5	10.9	11.8	5.3
Net foreign assets	–25.6	–26.8	–17.2	–14.4	–2.9	–5.1	–11.4	–7.9

Source: CBBH (2005a), OeNB calculations.

4 The Role of Foreign Exchange

The share of foreign currency-denominated credit (including foreign currency-indexed loans denominated in domestic currency) in total domestic credit went down spectacularly from end-1999 (80.3%) to end-2003 (28.2%). At the end of 2004, the share of foreign currency-denominated credit excluding foreign currency-indexed loans amounted to 15.4%.

The development of the share of foreign currency-denominated credit in total banking assets between 1997 and 2004 mirrored that of the share of foreign exchange credit in total domestic credit.

As the share of foreign assets did not change to a similar degree, total foreign assets and domestic foreign currency credit held a decreasing share in total assets from end-1999 to end-2004 (see table 13).

Table 13

Foreign Currency-Denominated Positions and Ratios on the Asset Side

	1997	1998	1999	2000	2001	2002	2003	2004
	BAM million							
Total domestic credit	2,440	2,921	2,781	3,017	3,339	4,281	5,122	5,927
Domestic local currency credit	197	207	549	993	1,612	2,775	3,685	5,015
Domestic foreign currency credit	1,636	1,756	2,232	2,024	1,727	1,506	1,436	912
Domestic foreign currency credit as a percentage of total domestic credit	*67.1*	*60.1*	*80.3*	*67.1*	*51.7*	*35.2*	*28.2*	*15.4*
Difference (RS data that is not broken down by currency)	607	958	0	0	0	0	0	0
Foreign assets	659	605	848	961	1,364	1,469	1,562	1,906
Sum of foreign assets and domestic foreign currency credit	2,295	2,361	3,080	2,985	3,091	2,975	2,998	2,819
	As a percentage of total banking assets							
Domestic foreign currency credit	49.0	47.0	57.2	47.4	31.0	23.7	18.7	9.7
Foreign assets	19.7	16.2	21.7	22.5	24.5	23.2	20.3	20.3
Sum of foreign assets and domestic foreign currency credit	68.8	63.3	78.9	70.0	55.4	46.9	39.0	30.0

Source: CBBH (2005a), OeNB calculations.

Note: BAM-denominated credits which include a currency clause (tied to the euro) are not available separately. Previously, banks reported these foreign currency-indexed loans as part of foreign currency-denominated credit. As from September 2004, these loans are reported as part of credits denominated in local currency (CBBH, 2005d).

On the liability side, the share of foreign currency-denominated deposits in total domestic deposits decreased from end-1997 to end-2000.[12] In 2001, this trend was interrupted as euro constituent currencies were deposited with banks in the run-up to the cash changeover at end-2001. However, the previous trend continued after 2001. The share of domestic foreign currency-denominated deposits in total banking liabilities showed a similar pattern.

The decreasing share of domestic foreign currency liabilities in total liabilities probably indicates growing confidence in the national currency, which, in turn, most likely reflects the growing credibility of the commitment to the currency board arrangement and thus also achievements in settling inflation expectations.

Although the share of foreign liabilities increased from end-2001 to end-2003 (after having fallen between 1997 and 2001), the share of the sum of foreign liabilities and domestic foreign currency deposits in total liabilities declined continuously until the end of 2004. However, the resulting decline was considerably less pronounced than that of the foreign currency-denominated position on the asset side (see table 14).

[12] *The amount of foreign currency-indexed deposits denominated in domestic currency is estimated to be negligible.*

Table 14

Foreign Currency-Denominated Positions and Ratios on the Liability Side

	1997	1998	1999	2000	2001	2002	2003	2004
	BAM million							
Total domestic deposits	1,382	1,662	1,820	1,954	3,271	3,724	4,366	5,578
Domestic local currency deposits	189	194	659	904	1,264	1,759	2,274	2,897
Domestic foreign currency deposits	1,028	1,062	1,161	1,050	2,006	1,966	2,092	2,681
Domestic foreign currency deposits as a percentage of total domestic deposits	*74.4*	*63.9*	*63.8*	*53.7*	*61.3*	*52.8*	*47.9*	*48.1*
Difference (RS data that is not broken down by currency)	165	406	0	0	0	0	0	0
Foreign liabilities	1,514	1,606	1,519	1,577	1,527	1,794	2,437	2,651
Sum of foreign liabilities and domestic foreign currency deposits	2,542	2,668	2,681	2,627	3,533	3,759	4,529	5,332
	% of total banking liabilities							
Domestic foreign currency deposits	30.8	28.4	29.7	24.6	36.0	31.0	27.2	28.5
Foreign liabilities	45.4	43.0	38.9	37.0	27.4	28.3	31.7	28.2
Sum of foreign liabilities and domestic foreign currency deposits	76.2	71.5	68.7	61.6	63.4	59.2	58.9	56.7

Source: CBBH (2005a), OeNB calculations.

Note: BAM-denominated deposits which include a currency clause (tied to the euro) are not available separately. However, their amount is estimated to be negligible (CBBH 2005d).

The net domestic foreign currency position (representing the difference of domestic foreign currency credit and domestic foreign currency deposits), which had been positive between end-1997 and end-2000, became negative by the end of 2001 due to the above-mentioned jump in deposits. Moreover, it deteriorated further until end-2003, as the share of domestic foreign currency deposits in total liabilities declined by less than that of domestic foreign currency credit in total assets. The further deterioration in 2004 resulted, at least partly, from the shifting of foreign currency-indexed loans to loans denominated in domestic currency.

Net foreign assets were always negative between the end of 1997 and 2004. The sharp decrease in the ratio of net foreign liabilities to total banking liabilities in 2001 resulted from the combined effect of the jump in foreign currency domestic deposits on the liability side (which reduced the share of foreign liabilities) and the redepositing of these additional funds on the asset side (which drove up the share of foreign assets). From end-2001 to end-2003, the net foreign liabilities position widened again.

The parallel widening of the negative net domestic foreign currency position and the negative net foreign asset position led to a significantly negative total net foreign currency position of –26.7% of total assets on balance at the end of 2004 (see table 15).

Table 15

Net Foreign Currency-Denominated Positions

	1997	1998	1999	2000	2001	2002	2003	2004
	BAM million							
Net domestic foreign currency position	608	694	1,071	974	–279	–460	–656	–1,769
Net foreign assets	–855	–1,001	–671	–616	–163	–325	–875	–745
Sum of net domestic foreign currency position and net foreign assets	–247	–306	400	358	–442	–784	–1,531	–2,514
	% of total banking assets/liabilities							
Net domestic foreign currency position	18.2	18.6	27.4	22.8	–5.0	–7.2	–8.5	–18.8
Net foreign assets	–25.6	–26.8	–17.2	–14.4	–2.9	–5.1	–11.4	–7.9
Sum of net domestic foreign currency position and net foreign assets	–7.4	–8.2	10.2	8.4	–7.9	–12.4	–19.9	–26.7

Source: CBBH (2005a), OeNB calculations.

5 Profitability and Capital Adequacy

It was not until 2003 that the banking sector in BiH registered positive profitability ratios. In 2004, return on equity (ROE) amounted to 6.5% in nominal terms and – given the low inflation rate – 6.1% in real terms (see table 18).

Net interest income (as a percentage of average total assets) declined in the period from 2001 to 2004 as a result of the narrowing overall interest rate margin (see table 16), which, in turn, may be partly related to the liquidity injection from increased funding by domestic deposits. However, at the same time, the share of net interest income in total operating income increased from 40% in 2001 to 50% in 2004 (see table 18).

Table 16

Interest Rates

	1997	1998	1999	2000	2001	2002	2003	2004
	Annual average, %							
Average interest rate on loans (new contracts)	. .	. .	. .	30.5	16.6	12.7	10.9	10.3
Average interest rate on deposits (new contracts)	. .	. .	. .	14.7	6.1	4.5	4.0	3.7
Average overall interest rate margin (new contracts)	. .	. .	. .	15.8	10.5	8.2	6.9	6.6

Source: CBBH (2004, 2005b), OeNB calculations.

Thus, the ratio of noninterest income to average total assets deteriorated even more markedly, resulting in a lower ratio of operating income to average total assets (see table 18). According to the CBBH, the main sources of noninterest revenues were service fees, followed by foreign exchange income.

However, the ratio of operating costs to average total assets declined in tandem. Thereby, the cost-to-income ratio fell slightly, indicating increasing efficiency on the cost side (see table 18). At the same time, the total number of employees in the banking sector went up. As annual employment growth in employment was weaker than total asset growth, one may assume that staff efficiency improved (see table 17). The rise in both nominal and real operating profits per employee from 2001 to 2004 also supports this assumption.

Table 17

Number of Persons Employed in the Banking Sector

	1997	1998	1999	2000	2001	2002	2003	2004
	End of period							
Federation of Bosnia and Herzegovina	. .	. .	. .	4,289	4,610	5,101	5,394	5,686
Republika Srpska	. .	. .	. .	2,697	2,705	2,418	2,229	2,153
Bosnia and Herzegovina	. .	. .	. .	6,986	7,315	7,519	7,623	7,839
Annual change in employment (%, BiH)	. .	. .	. .	3.0	4.7	2.8	1.4	2.8
Annual change in banking assets (%, BiH)	. .	11.9	4.6	9.2	30.7	13.8	21.2	22.3
Annual change in operating profits (%, BiH)	. .	. .	. .	. .	3.5	20.3	8.5	7.9

Source: Banking Agency of the FBiH (2004, 2005), Banking Agency of the RS (2004, 2005), OeNB calculations.

Despite the decrease in operating profits (as a percentage of total assets) registered from 2001 to 2004, a continuous improvement of the pretax result could be achieved, as the costs of loan loss provisioning fell significantly over the same period. In addition, the decline in the tax burden further enhanced after-tax profitability (see table 18).

Table 18

Profitability and Structure of Income and Costs

	1997	1998	1999	2000	2001	2002	2003	2004
	BAM 1,000							
Total assets, average[1])	. .	. .	. .	. .	3,808,884	4,975,909	6,230,403	8,153,384
Equity, average	. .	. .	. .	. .	692,440	759,896	857,432	1,001,637
Operating income	. .	. .	. .	460,122	483,342	581,329	625,399	660,772
Operating income as a percentage of total assets, average	. .	. .	. .	. .	12.7	11.7	10.0	8.1
Net interest income	. .	. .	. .	184,892	192,734	230,301	282,785	327,751
Net interest income as a percentage of total assets, average	. .	. .	. .	. .	5.1	4.6	4.5	4.0
Net interest income as a percentage of operating income	. .	. .	. .	40.2	39.9	39.6	45.2	49.6
Noninterest income	. .	. .	. .	275,230	290,608	351,028	342,614	333,021
Noninterest income as a percentage of total assets, average	. .	. .	. .	. .	7.6	7.1	5.5	4.1
Noninterest income as a percentage of operating income	. .	. .	. .	59.8	60.1	60.4	54.8	50.4
Operating costs	. .	. .	. .	299,459	317,058	381,319	408,361	426,642
Operating costs as a percentage of total assets, average	. .	. .	. .	. .	8.3	7.7	6.6	5.2
Cost-to-income ratio	. .	. .	. .	65.1	65.6	65.6	65.3	64.6
Operating profit	. .	. .	. .	160,663	166,284	200,010	217,038	234,130
Operating profit as a percentage of total assets, average	. .	. .	. .	. .	4.4	4.0	3.5	2.9
Net costs of loan loss provisioning	. .	. .	. .	210,713	198,835	211,062	186,845	167,730
Net costs of loan loss provisioning as a percentage of total assets, average	. .	. .	. .	. .	5.2	4.2	3.0	2.1
Pretax profit	. .	. .	. .	–50,050	–32,551	–11,052	30,193	66,400
Tax	. .	. .	. .	3,248	4,045	2,752	2,923	1,100
Net aftertax profit	. .	. .	. .	–53,298	–36,596	–13,804	27,270	65,300
Tax burden as a percentage of pretax profit	. .	. .	. .	–6.5	–12.4	–24.9	9.7	1.7
ROA , %	. .	. .	. .	. .	–1.0	–0.3	0.4	0.8
ROA deflated by CPI (year-on-year average)	. .	. .	. .	. .	–3.9	–0.7	–0.2	0.4
ROE, %	. .	. .	. .	. .	–5.3	–1.8	3.2	6.5
ROE deflated by CPI (year-on-year average)	. .	. .	. .	. .	–8.1	–2.2	2.6	6.1

Source: Banking agency of the FBiH (2004, 2005), Banking Agency of the RS (2004, 2005), OeNB calculations.

Note: Figures for the entire banking sector of BiH derived by own calculation from the figures published separately for the FBiH and the RS. As available information is limited, it was not possible to consolidate the figures for the two separate entities; therefore, the figures in this table are merely aggregated.

[1]) Total banking assets excluding off-balance sheet items and after deduction of loan loss provisions and reserves on assets.

The coefficient of capital adequacy (representing the relation between the capital base and risk-weighted assets) of the BiH banking sector fell from 28.4% at end-2000 to 18.6% at end-2004.

From 2001 to 2004, the year-on-year growth of the total risk component outpaced that of the net capital base. Thus, not a decrease of capital, but strong asset growth and the subsequently higher total risk component led to a lower, albeit still not low, capital adequacy ratio (see table 19).

Table 19

Capital Adequacy

	1997	1998	1999	2000	2001	2002	2003	2004
Net capital base (BAM million)	. .	. .	. .	687	731	884	1,051	1,242
Total risk component (BAM million)	. .	. .	. .	2,422	2,911	4,312	5,177	6,665
Net capital base (year on year)	. .	. .	. .	. .	6.4	20.9	18.8	18.3
Total risk component (year on year)	. .	. .	. .	. .	20.2	48.1	20.1	28.8
Capital adequacy ratio	. .	. .	. .	28.4	25.1	20.5	20.3	18.6

Source: Banking Agency of the FBiH (2004, 2005), Banking Agency of the RS (2004, 2005), OeNB calculations.

6 Conclusions

The banking sector in Bosnia and Herzegovina operates in a stable macroeconomic environment, with inflation below 1% (on the back of a currency board arrangement) and real GDP growth coming to around 5% on average in recent years. However, the current account deficit widened sharply until 2003 and remained at a very high level in 2004.

The market entry of foreign banks, which currently control more than two-thirds of total banking capital, supported the reform process in the banking sector and helped deepen financial intermediation. In recent years, the number of banks has considerably declined. By the end of 2003, the banking sector was already rather concentrated, with the five largest banks controlling 64% of total banking assets. Three out of the five largest banks in BiH were owned by Austrian banks and together held a market share of more than 45%. The degree of financial intermediation as measured by the ratio of total banking assets to GDP is higher than the average degree in SEE, but lower than that in the NMS.

In 2001, financial intermediation received an important boost by the euro cash changeover, as this led to an upward jump in households' foreign currency deposits with the banking sector. A substantial part of those foreign currency deposits that were converted into euro continued to be kept with the banks in the following years. This phenomenon reflected a higher confidence in the banking sector and provided the basis for strong lending growth, in particular of lending to households. In parallel, confidence in the national currency increased as well, as can be seen from the fact that the share of domestic foreign currency-denominated liabilities in total liabilities declined continuously (with the exception being the year 2001, given the impact of the euro cash changeover). From end-2001 to end-2004, household lending growth outpaced further household deposit growth by far. The resulting decline in the negative net position against households relative to total liabilities was facilitated by the drop in the positive net position against nonfinancial corporations, which helped contain the rise in the ratio of net foreign liabilities to total liabilities. Still, combined with the fact that the share of foreign currency deposits in total domestic deposits declined at a slower pace than the share of foreign currency credits in total domestic credit, the total on-balance net foreign currency position turned from being positive at end-2000 (8.4% of total assets/liabilities) to being significantly negative at end-2004 (26.7% of total assets/liabilities).

It is worth noting that asset quality improved significantly from end-2001 to end-2004 despite the strong increase in total domestic claims. However, the clearly higher share of household credit to total domestic credit could weaken future asset quality. Despite having deteriorated in recent years, the capital adequacy ratio stood at close to 20% at the end of 2004.

The visible progress in banking sector consolidation in general and the improvement in asset quality in particular made the banking sector more efficient and profitable. The smaller volume of loan loss provisioning due to the improved asset quality decisively supported the 2003 turnaround in banking sector profitability.

The main challenges for the banking sector in Bosnia and Herzegovina are first, to step up (longer-term) lending to nonfinancial corporations; second, to keep its overall net foreign currency position under control during the domestic household lending boom; third, to closely monitor the development of asset quality; and fourth, to further improve its operational efficiency as measured for instance by the cost-to-income ratio.

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