

**CROATIAN NATIONAL BANK**

**Analysis of the External Debt of the Republic of Croatia**

**Zagreb  
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## **1 SHORT OVERVIEW OF DEVELOPMENTS IN THE BANKING SECTOR AND CHARACTERISTICS OF CROATIA'S EXTERNAL DEBT**

In the European Union, the period from 2001 to mid-2005 was marked by slow economic growth and expansionary monetary policy which reduced interest rates to their historically lowest levels by creating ample liquidity. Slow economic growth, averaging some 1% in the eurozone, combined with low interest rates had an exceptionally negative influence on the profitability of the banking system. Shortly before, in late 1990s the process of bank privatization started in Croatia, with banks being sold to the leading regional banks of Central and Eastern Europe. As a result, 90% of Croatia's total banking system assets became part of foreign banks' equity portfolios, mostly banks from Italy and Austria.

This was a logical step for foreign banks because they transferred their operations to areas where they could generate more profit. As a transition country striving to approach and join the EU, Croatia had a much higher economic growth rate and much higher interest rates compared with Western Europe. After being privatized, under the influence of their new owners domestic banks suddenly expanded their lending due to differences between domestic and foreign interest rates and the expected more intensive economic growth. The annual growth rate of bank placements, excluding the effects of the exchange rate, totalled 9.3% in 2000, jumping up to 25.5% and 30.3% in 2001 and 2002, respectively. In the period between 2003 and 2005, the annual rate of placements' growth was lower, ranging between 13% and 20%, primarily due to measures undertaken by the Croatian National Bank (CNB). A similar trend of accelerated growth of bank placements following bank sale to foreign leading regional banks was observed in other countries of South East Europe as well.

Ample loan supply, based on virtually unlimited foreign sources, in terms of absorbing capacity of the domestic market, at increasingly more favourable terms spurred adequate demand. In contrast to previous years, when banks extended predominantly corporate loans, the household sector became their major client. In the period between 2001 and 2005, placements to households rose twice as fast as placements to the corporate sector (at 28.5% compared with 14%, on average year-on-year). At first, banks strove to ensure security by imposing more strict measures for securing their placements. As a result, numerous solidary debtors and large mortgages were a common occurrence. However, with time and under the influence of strong competition banks eased their loan approval criteria and requirements as regards instruments of collateral. In particular, in connection with lending to households it is visible that banks have gradually relinquished the notion of a solidary debtor as a standard important element for securing bank loans in Croatia. In addition, the required ratio between material assets pledged as security and loan amount significantly declined, currently barely exceeding the ratio of one to one.

At the same time, the danger arising from excessive bank reliance on lending to households has been increasing because of its unfavourable effect on investments and economic growth, arising from the fact that loans to households are primarily used for financing personal consumption, while loans to the corporate sector are used for financing investments which are the key generator of economic growth. The change in the structure of bank clients in favour of households therefore effected a decline in investments. It should be stressed that the process of transition and EU approximation opened new possibilities for Croatian companies as regards the financing of their

operations. As a result, companies that were previously financed exclusively by banks are presently provided with other options.

High growth rates of bank placements, both to households and companies, have been followed by personal consumption and investments growth, while the increase in domestic demand also caused fast growth of imports. Among imported products, cars and different, especially unclassified, finished products grew at the strongest rates for several years in a row. Equipment imports also grew at strong rates. Imports expansion substantially widened the negative foreign trade balance which averaged at some 25% of GDP over the past four years. An even greater deficit in the balance of payments current account was prevented thanks to a recovery in tourism, so the current account deficit over the period in question totalled 7% of GDP. In summary, speedy growth of bank placements enabled sizeable GDP growth based on the growth of domestic demand and deterioration in the balance of payments.

The policy of parent banks to place their funds through their subsidiaries in Croatia, where returns on these assets are higher, as confirmed by much slower growth of domestic deposits with banks than bank placements, led to the speedy growth of total external debt. At the same time, the banking sector became the largest direct borrower of foreign funds.

Foreign borrowing, apart from generating a large balance of payments deficit through loan expansion, also created an ample supply of foreign exchange in the domestic foreign exchange market and caused continued appreciation pressures. The apparent paradox of a strengthening national currency in a country with a high balance of payments deficit arose as a result. The Croatian National Bank was forced to soften appreciation pressures by intervening in the foreign exchange market. It purchased foreign exchange and raised foreign exchange reserves, thus creating surplus liquidity and being constantly faced with the problem of sterilizing this surplus. A direct consequence of this situation paired with fast growth of foreign borrowing was CNB's inability to conduct an optimal liquidity policy, thus exposing itself to inflation risks, as well as its inability to improve its monetary policy instruments more quickly and more decisively and reduce its reserve requirement rate, bringing it to the level and giving it the role this instrument has in other European economies. Full sterilization of surplus liquidity, created by foreign exchange purchase aimed at preventing the appreciation of domestic currency would lead to a closed circle of rising interest rates on CNB bills, T-bills of the Ministry of Finance (MoF) and total interest rates, which would additionally stimulate capital inflow and the borrowing of domestic banks or their connected persons at foreign parent banks and thus new sterilization efforts. As a result, fast growth of foreign borrowing must be viewed not only in the light of sustainability and credibility of the country's external positions as well as direct costs of debt servicing but also from the point of view of the cost of the efficiency of the monetary policy. In other words, high costs of monetary regulation and monetary instruments, which are a direct consequence of the current policy of commercial banks and which are felt by the banking system, cannot start to be reduced until the ratio of external debt to GDP is not stabilized.

## **2 CROATIA'S EXTERNAL DEBT: BALANCE, RELATIVE INDICATORS OF NET AND GROSS EXTERNAL DEBT AND INTERNATIONAL COMPARISON**

### **2.1 EXTERNAL DEBT DEFINITION**

The World Bank and the International Monetary Fund (IMF) introduced a new standard of external debt reporting early in 2004 in order to ensure international comparability of external debt data. The new standard is based on the principle of gross external debt. Gross external debt, at any given time, is the outstanding amount of those actual current, and not contingent, liabilities that require payment of principal and/or interest by the debtor at some point and that are owed to non-residents by residents of an economy.

In line with the guidelines of the World Bank and the IMF, the CNB, which monitors the external debt balance of the Republic of Croatia, decided early in 2005 to adjust its reports on Croatia's external debt on gross principle. As a result, in addition to debt liabilities owed by Croatia's residents to non-residents arising from: debt securities issued in foreign markets (at par value), loans (including repos<sup>1</sup>) irrespective of their maturity, deposits received from foreign persons and trade credits received from foreign persons, with agreed maturity of over 180 days, as of that time external debt includes also interest arrears and accrual interest.

### **2.2 SHORT OVERVIEW OF CROATIA'S EXTERNAL DEBT ACCUMULATION AND KEY TRENDS**

At the end of 2005, Croatia's external debt reached EUR 25.5bn. Considering the fact that gross domestic product for the year totalled EUR 30.9bn, the question arises what (which domestic sector) and to what extent contributed to the accumulation of such a high level of external liabilities in a relatively short period. The following several paragraphs give a short overview of the accumulation of Croatia's external debt and trends that have marked its strong growth over the past ten years, with the initial foreign liabilities of the Republic of Croatia arising from the debt accumulated by the former SFRY.

Following SFRY's dissolution, the issue of the repayment of external liabilities accumulated by the former Federation remained opened. The resolving of the issue of distributing the said liabilities among successor states was a complex endeavour because one share of the debt consisted of liabilities which could be allocated to an individual successor state based on existing documents, while the borrowers or rather the end users of one share of the debt could not be determined. Foreign creditors, worried about the repayment of their loans to the former SFRY, were not willing to extend new credit lines to Croatia or any other successor state of the former Federation until new debtors were determined for the total external debt of the former SFRY. As a result, in the most difficult war years Croatia did not have access to foreign capital markets.

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<sup>1</sup> In its economic essence, repo operation is a collateralized loan, with securities being used as collateral (bonds, MoF T-bills and other government securities). At the moment when a repo transaction is concluded, an arrangement is made to sell securities, stipulating repurchase at a specified price on a predetermined future date, which means that the investor temporarily submits a security and receives money and eventually pays interest.

Croatia's position on the international financial scene started changing in 1995. At the IMF's proposal, Croatia signed the Agreed Minutes with the members of the Paris Club in March 1995. On the basis of the Agreed Minutes, Croatia took over external debt owed by or guaranteed by legal persons from the territory of the Republic of Croatia (the so-called **allocated debt**) and 28.49% of the debt owed or guaranteed by the former SFRY and not attributable to any successor state (the so-called **non-allocated debt**).<sup>2</sup> After that Croatia rescheduled USD 0.9bn of foreign liabilities through bilateral agreements, which are to be repaid over a 14-year period with two-year grace period. In April 1996, Croatia entered into an Agreement with the International Coordinating Committee of commercial bank creditors of the former SFRY, the members of the London Club, accepting responsibility for USD 1.5bn worth of debt to the London Club. Late in July 1996, equal amount of debt was exchanged for Series A (USD 0.9bn) and Series B (USD 0.6bn) Croatian bonds.

By signing the agreement with Paris and London Club creditors, Croatia normalized its relations with all its prior external creditors thus creating the basis for its first appearance in the international capital market. Since domestic savings and other forms of finance (such as foreign direct investments) were not sufficient to cater for the needs of the country just out of war, new external borrowings became a necessity. The Government of the Republic of Croatia signed its first syndicated loan agreement already in October 1996, while it issued its first bond in the foreign market in February 1997.

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<sup>2</sup> According to the agreed distribution key, Croatia took over 28.49% of the assets and liabilities of the former Yugoslav federation, Serbia and Montenegro took over a share of 36.52%, Slovenia a share of 16.36%, Bosnia and Herzegovina a share of 13.20% and Macedonia a share of 5.40%.

**Table 1** External Debt of the Republic of Croatia by Domestic Sectors, 1998-2001  
(in million euros and %, end of period)

	1998	(%)	1999	(%)	2000	(%)	2001	(%)
<b>1. Government</b>	<b>3,340</b>	36.4	<b>4,026</b>	39.9	<b>5,277</b>	43.6	<b>5,942</b>	44.2
Short-term debt	44	0.5	78	0.8	389	3.2	0	0.0
o/w: Credits	43	0.5	75	0.7	388	3.2	0	0.0
Long-term debt	3,297	35.9	3,949	39.1	4,888	40.4	5,942	44.2
o/w: Bonds	1,983	21.6	2,564	25.4	3,443	28.4	4,268	31.7
Credits	1,312	14.3	1,384	13.7	1,445	11.9	1,673	12.4
<b>2. Croatian National Bank</b>	<b>244</b>	2.7	<b>218</b>	2.2	<b>215</b>	1.8	<b>215</b>	1.6
Short-term debt	0	0.0	21	0.2	44	0.4	75	0.6
o/w: Credits	0	0.0	21	0.2	44	0.4	75	0.6
Long-term debt	244	2.7	197	2.0	172	1.4	140	1.0
o/w: Credits	243	2.7	196	1.9	171	1.4	139	1.0
<b>3. Banks</b>	<b>2,195</b>	23.9	<b>2,135</b>	21.1	<b>2,196</b>	18.1	<b>2,547</b>	18.9
Short-term debt	26	0.3	28	0.3	23	0.2	18	0.1
o/w: Credits	12	0.1	14	0.1	8	0.1	3	0.0
Long-term debt	2,169	23.6	2,107	20.9	2,173	17.9	2,529	18.8
o/w: Credits	1,644	17.9	1,572	15.6	1,708	14.1	1,811	13.5
Currency and deposits	525	5.7	536	5.3	465	3.8	718	5.3
<b>4. Other domestic sectors</b>	<b>3,154</b>	34.4	<b>3,361</b>	33.3	<b>3,709</b>	30.6	<b>3,662</b>	27.2
Short-term debt	440	4.8	499	4.9	426	3.5	435	3.2
o/w: Money market instruments	7	0.1	17	0.2	10	0.1	31	0.2
Credits	208	2.3	130	1.3	46	0.4	54	0.4
Principal arrears	134	1.5	275	2.7	310	2.6	293	2.2
Long-term debt	2,714	29.6	2,862	28.3	3,283	27.1	3,227	24.0
o/w: Bonds	0	0.0	31	0.3	31	0.3	31	0.2
Credits	2,409	26.3	2,563	25.4	3,004	24.8	2,969	22.1
Trade credits	304	3.3	268	2.7	248	2.1	227	1.7
<b>5. Direct investment</b>	<b>240</b>	2.6	<b>360</b>	3.6	<b>713</b>	5.9	<b>1,091</b>	8.1
Short-term debt	11	0.1	19	0.2	82	0.7	49	0.4
o/w: Credits	9	0.1	12	0.1	23	0.2	4	0.0
Principal arrears	3	0.0	5	0.0	15	0.1	42	0.3
Long-term debt	228	2.5	341	3.4	631	5.2	1,042	7.7
o/w: Credits	223	2.4	334	3.3	603	5.0	1,021	7.6
Trade credits	6	0.1	7	0.1	28	0.2	21	0.2
<b>Total (1+2+3+4+5)</b>	<b>9,173</b>	100.0	<b>10,101</b>	100.0	<b>12,109</b>	100.0	<b>13,458</b>	100.0

Source: CNB.

By reviewing the developments in the structure of external debt by domestic sector in the period until 2002 (see Table 1), without analyzing the details of external debt developments in each calendar year, it may be concluded that during the first years following the entry into the international capital market the government's external debt grew at the most significant rate, primarily due to the need to finance post-war restoration efforts, infrastructure projects and restructuring of the economy. The debt of banks and the corporate sector grew at a much slower rate. In the first period, from the opening of the international capital markets **until end-2001**, Croatia's external debt was to the greatest extent **generated by loans taken out by the domestic public or private sector** and was **guaranteed by the government**. During the same period, private creditors approved a relatively small number of loans that were not secured by public sector guarantees.

**Table 2** External Debt of the Republic of Croatia by Foreign Creditors, 1998-2001  
(in million euros and %, end of period)

	1998	(%)	1999	(%)	2000	(%)	2001	(%)
<b>1. Portfolio investment</b>	<b>1,990</b>	21.7	<b>2,612</b>	25.9	<b>3,485</b>	28.8	<b>4,330</b>	32.2
o/w: Long-term debt (Bonds)	1,983	21.6	2,595	25.7	3,474	28.7	4,299	31.9
<b>2. Currency and deposits</b>	<b>526</b>	5.7	<b>536</b>	5.3	<b>466</b>	3.8	<b>720</b>	5.3
<b>3. Public sector</b>	<b>2,394</b>	26.1	<b>2,155</b>	21.3	<b>2,440</b>	20.1	<b>2,554</b>	19.0
<b>3.1. International financial institutions</b>	<b>1,202</b>	13.1	<b>1,045</b>	10.3	<b>1,222</b>	10.1	<b>1,335</b>	9.9
Short-term debt	0	0.0	1	0.0	5	0.0	6	0.0
Long-term debt	1,201	13.1	1,044	10.3	1,216	10.0	1,329	9.9
a) IMF	243	2.7	196	1.9	171	1.4	139	1.0
b) IBRD	362	3.9	397	3.9	452	3.7	536	4.0
c) IFC	27	0.3	36	0.4	75	0.6	96	0.7
d) EBRD	241	2.6	220	2.2	318	2.6	361	2.7
e) EUROFIMA	68	0.7	79	0.8	93	0.8	96	0.7
f) EIB	259	2.8	100	1.0	82	0.7	61	0.5
g) CEB	2	0.0	15	0.2	26	0.2	41	0.3
h) BIS	0	0.0	0	0.0	0	0.0	0	0.0
<b>3.2. Government and government agencies</b>	<b>1,193</b>	13.0	<b>1,109</b>	11.0	<b>1,218</b>	10.1	<b>1,220</b>	9.1
Short-term debt	27	0.3	30	0.3	29	0.2	31	0.2
Long-term debt	1,165	12.7	1,080	10.7	1,188	9.8	1,189	8.8
o/w: Paris Club	869	9.5	772	7.6	740	6.1	707	5.3
<b>4. Private creditors</b>	<b>4,263</b>	46.5	<b>4,798</b>	47.5	<b>5,719</b>	47.2	<b>5,854</b>	43.5
<b>4.1. Banks</b>	<b>3,254</b>	35.5	<b>3,705</b>	36.7	<b>4,339</b>	35.8	<b>4,501</b>	33.4
Short-term debt	286	3.1	349	3.5	655	5.4	286	2.1
Long-term debt	2,968	32.4	3,355	33.2	3,684	30.4	4,214	31.3
<b>4.2. Other sectors</b>	<b>1,009</b>	11.0	<b>1,093</b>	10.8	<b>1,380</b>	11.4	<b>1,353</b>	10.1
Short-term debt	201	2.2	248	2.5	263	2.2	224	1.7
Long-term debt	808	8.8	845	8.4	1,117	9.2	1,129	8.4
<b>Total (1+2+3+4)</b>	<b>9,173</b>	100.0	<b>10,101</b>	100.0	<b>12,109</b>	100.0	<b>13,458</b>	100.0

Source CNB.

In 2002, a new period began which was marked by a series of key changes, both in Croatia and in the wider region. During 1999 and 2000, Croatia's banking system was almost fully privatized, with over 90% of commercial banks' assets being transferred into the hands of foreign investors. The entry of foreign capital to Croatia was looked upon with favour because it was thought that it could additionally contribute to further consolidation of the financial system, with revenues from the privatization of commercial banks being largely directed at financing government spending. Banks' foreign owners quickly expanded their influence and took control over other parts of the financial system (pension and investment funds, leasing and insurance companies).

In the second half of 2001, a large share of domestic foreign currency savings that was previously held outside the banking system flew into the domestic banking system in order to benefit from the euro-conversion without charges. When the initial effects of the increase in foreign currency deposits were exploited in 2002, banks started borrowing increasingly from their parent banks abroad and in order to maximize their profits they also started with strong promotion of their financial products in the domestic market. When the new foreign exchange act was passed in 2003, providing for almost complete liberalization of long-term capital flows and announcing gradual liberalization of short-term capital flows, the process of liberalization of transactions on capital and financial account coincided with the period of a strong slowdown in the economic activity in the European Union. This resulted in a sizeable drop in interest rates as well as in the

return on equity and yields on government bonds, which additionally increased the appeal of the Croatian market to foreign investors and foreign bank placements.

In 2003 alone, banks' debt thus increased by EUR 4.8bn, or by exceptionally high 32% year-on-year. To the greatest extent, banks channelled the funds received from abroad into placements to the household sector, which went up by HRK 11.9bn or 27.7%. Loans extended to households were largely used for purchase of consumer durables, primarily cars. This significantly accelerated the growth of the total import of goods (from 17.2% in 2002 to 32.5% in 2003 year-on-year, in US dollars at the current exchange rate) and significantly contributed to the widening of the foreign trade imbalance.

From 2003 onwards, the competition in the financial intermediation market and the struggle to acquire market shares contributed to a reduction in interest rates in Croatia. Despite CNB's measures aimed at making banks' foreign borrowing more expensive (CNB measures will be discussed in more detail in the text below), the spreads between effective interest rates on placements in the country and expenses of foreign borrowing were still very wide, resulting in large profits of domestic banks.

Although personal consumption growth in real terms did not go up at rates as high as those that marked 2002 and 2003 (averaging 6.1%), the lending activity of banks provided for steep personal consumption growth over the following two years as well. The average growth rate of bank placements to households totalled 19.5% in 2004 and 2005, resulting in personal consumption growth of 3.9% in 2004 and 3.4% in 2005. This effected further deterioration in the foreign trade balance and thus a significant rise in the deficit on the current account of the balance of payments, which averaged some 6.8% of GDP in the period from 2002 to 2005.

**Table 3** External Debt of the Republic of Croatia by Domestic Sectors, 2002-2005  
(in million euros and %, end of period)

	2002	(%)	2003	(%)	2004	(%)	2005	(%)
<b>1. Government</b>	<b>5,900</b>	<b>39.2</b>	<b>6,601</b>	<b>33.3</b>	<b>7,252</b>	<b>31.8</b>	<b>7,062</b>	<b>27.7</b>
Short-term debt	1	0.0	1	0.0	3	0.0	3	0.0
o/w: Credits	0	0.0	0	0.0	0	0.0	0	0.0
Long-term debt	5,899	39.2	6,600	33.3	7,249	31.8	7,060	27.7
o/w: Bonds	3,948	26.2	4,311	21.8	4,648	20.4	4,074	16.0
Credits	1,951	13.0	2,286	11.5	2,599	11.4	2,984	11.7
<b>2. Croatian National Bank</b>	<b>23</b>	<b>0.2</b>	<b>366</b>	<b>1.8</b>	<b>2</b>	<b>0.0</b>	<b>3</b>	<b>0.0</b>
Long-term debt	22	0.1	363	1.8	0	0.0	0	0.0
o/w: Credits	22	0.1	363	1.8	0	0.0	0	0.0
Short-term debt	2	0.0	3	0.0	2	0.0	3	0.0
o/w: Credits	0	0.0	0	0.0	0	0.0	0	0.0
<b>3. Banks</b>	<b>3,790</b>	<b>25.2</b>	<b>6,121</b>	<b>30.9</b>	<b>7,702</b>	<b>33.8</b>	<b>8,990</b>	<b>35.2</b>
Short-term debt	14	0.1	617	3.1	1,965	8.6	2,522	9.9
o/w: Credits	0	0.0	604	3.1	514	2.3	1,080	4.2
Long-term debt	3,775	25.1	5,504	27.8	5,737	25.2	6,468	25.4
o/w: Credits	1,878	12.5	2,768	14.0	3,512	15.4	3,830	15.0
Currency and deposits	1,897	12.6	2,736	13.8	1,780	7.8	2,180	8.5
<b>4. Other domestic sectors</b>	<b>3,935</b>	<b>26.1</b>	<b>4,878</b>	<b>24.6</b>	<b>5,809</b>	<b>25.5</b>	<b>7,117</b>	<b>27.9</b>
Short-term debt	461	3.1	523	2.6	530	2.3	875	3.4
o/w: Money market instruments	0	0.0	33	0.2	0	0.0	0	0.0
Credits	27	0.2	70	0.4	100	0.4	317	1.2
Principal arrears	365	2.4	370	1.9	377	1.7	476	1.9
Long-term debt	3,474	23.1	4,355	22.0	5,279	23.2	6,243	24.5
o/w: Bonds	161	1.1	345	1.7	381	1.7	366	1.4
Credits	3,103	20.6	3,858	19.5	4,770	20.9	5,721	22.4
Trade credits	210	1.4	152	0.8	129	0.6	156	0.6
<b>5. Direct investment</b>	<b>1,407</b>	<b>9.3</b>	<b>1,845</b>	<b>9.3</b>	<b>2,016</b>	<b>8.8</b>	<b>2,335</b>	<b>9.2</b>
Short-term debt	73	0.5	124	0.6	120	0.5	210	0.8
o/w: Credits	30	0.2	44	0.2	36	0.2	59	0.2
Principal arrears	41	0.3	76	0.4	77	0.3	135	0.5
Long-term debt	1,334	8.9	1,721	8.7	1,895	8.3	2,125	8.3
o/w: Credits	1,300	8.6	1,690	8.5	1,867	8.2	2,096	8.2
Trade credits	34	0.2	31	0.2	29	0.1	29	0.1
<b>Total (1+2+3+4+5)</b>	<b>15,055</b>	<b>100.0</b>	<b>19,811</b>	<b>100.0</b>	<b>22,781</b>	<b>100.0</b>	<b>25,508</b>	<b>100.0</b>

Source: CNB.

Strong bank borrowing in the period from 2002 onwards was followed by the corporate sector as well. To an extent, this should be attributed to banks' own activity, which, by attempting to avoid CNB measures aimed at curbing external borrowing, transferred shares of their operations to different types of non-banking companies (connected legal persons operating in the segment of financial leasing, investment consulting etc.) or referred some of their clients to direct borrowing from their owners, i.e. their parent banks abroad.

**Table 4** External Debt of the Republic of Croatia by Foreign Creditors, 2002-2005  
(in million euros and %, end of period)

	2002	(%)	2003	(%)	2004	(%)	2005	(%)
<b>1. Portfolio investment</b>	<b>4,109</b>	27.3	<b>4,690</b>	23.7	<b>5,473</b>	24.0	<b>4,898</b>	19.2
o/w: Long-term debt (Bonds)	4,109	27.3	4,656	23.5	5,473	24.0	4,898	19.2
<b>2. Currency and deposits</b>	<b>1,899</b>	12.6	<b>2,739</b>	13.8	<b>3,221</b>	14.1	<b>3,612</b>	14.2
<b>3. Public sector</b>	<b>2,526</b>	16.8	<b>2,701</b>	13.6	<b>2,982</b>	13.1	<b>3,176</b>	12.4
<b>3.1. International financial institutions</b>	<b>1,344</b>	8.9	<b>1,445</b>	7.3	<b>1,651</b>	7.2	<b>1,852</b>	7.3
Short-term debt	8	0.1	9	0.0	13	0.1	18	0.1
Long-term debt	1,336	8.9	1,435	7.2	1,638	7.2	1,834	7.2
a) IMF	0	0.0	0	0.0	0	0.0	0	0.0
b) IBRD	592	3.9	626	3.2	625	2.7	672	2.6
c) IFC	126	0.8	85	0.4	168	0.7	175	0.7
d) EBRD	360	2.4	395	2.0	473	2.1	499	2.0
e) EUROFIMA	107	0.7	102	0.5	91	0.4	101	0.4
f) EIB	87	0.6	133	0.7	164	0.7	230	0.9
g) CEB	63	0.4	95	0.5	118	0.5	157	0.6
h) BIS	0	0.0	0	0.0	0	0.0	0	0.0
<b>3.2. Government and government agencies</b>	<b>1,182</b>	7.9	<b>1,256</b>	6.3	<b>1,331</b>	5.8	<b>1,324</b>	5.2
Short-term debt	32	0.2	35	0.2	31	0.1	34	0.1
Long-term debt	1,150	7.6	1,221	6.2	1,300	5.7	1,290	5.1
o/w: Paris Club	606	4.0	506	2.6	432	1.9	393	1.5
<b>4. Private creditors</b>	<b>6,522</b>	43.3	<b>9,681</b>	48.9	<b>11,105</b>	48.7	<b>13,822</b>	54.2
<b>4.1. Banks</b>	<b>4,990</b>	33.1	<b>7,973</b>	40.2	<b>8,988</b>	39.5	<b>11,359</b>	44.5
Short-term debt	234	1.6	1,223	6.2	794	3.5	1,599	6.3
Long-term debt	4,755	31.6	6,750	34.1	8,194	36.0	9,760	38.3
<b>4.2. Other sectors</b>	<b>1,532</b>	10.2	<b>1,708</b>	8.6	<b>2,116</b>	9.3	<b>2,463</b>	9.7
Short-term debt	296	2.0	328	1.7	341	1.5	530	2.1
Long-term debt	1,236	8.2	1,381	7.0	1,775	7.8	1,933	7.6
<b>Total (1+2+3+4)</b>	<b>15,055</b>	100.0	<b>19,811</b>	100.0	<b>22,781</b>	100.0	<b>25,508</b>	100.0

Source: CNB.

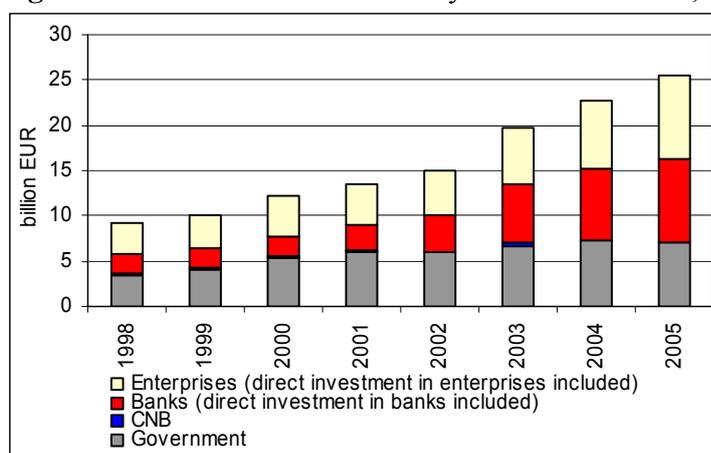
Attempting to spur overall economic growth, the government started a cycle of large investments in capital infrastructure objects in 2002, primarily motorways, which, paired with the above-mentioned rise in personal consumption, made the greatest contribution to relatively high real GDP growth rates in the period from 2002 to 2005 (averaging 4.7%). Data on the structure of GDP in 2002 and 2003 reflects exceptionally steep growth of capital formation, averaging some 19.2% year-on-year in real terms. The growth of total investments in road construction during the said period was partly accounted for directly by the government sector, while the rise of investments by the private sector made up the other share. This is confirmed by the ratio of savings to investments in Croatia, shown in Table 5.

**Table 5** Savings-Investment Balance, as % of GDP

	2000	2001	2002	2003	2004	2005
<b>Savings-investment gap</b>	<b>-2.6</b>	<b>-3.7</b>	<b>-8.6</b>	<b>-7.2</b>	<b>-5.2</b>	<b>-6.3</b>
Savings	17.6	20.3	20.5	23.9	25.7	25.0
Investment	20.2	23.9	29.1	31.1	30.9	31.3
<b>Consolidated central government</b>	<b>-6.3</b>	<b>-4.8</b>	<b>-3.7</b>	<b>-4.1</b>	<b>-4.0</b>	<b>-2.9</b>
Savings	-2.5	-2.2	1.0	0.9	1.8	2.1
Investment	3.9	2.7	4.7	5.1	5.8	5.0
<b>Private sector</b>	<b>3.7</b>	<b>1.2</b>	<b>-4.8</b>	<b>-3.0</b>	<b>-1.1</b>	<b>-3.4</b>
Savings	20.1	22.4	19.5	23.0	23.9	22.9
Investment	16.3	21.3	24.4	26.0	25.1	26.3

Sources: MoF and CNB.

With rising repayments of external debt principal the government was not able to finance capital expenditures from current sources of finance so in the period until 2004 it continued to rely on foreign sources of finance. The government's new strategy, including gradual reduction of the budget deficit and its financing in the domestic capital market, resulted in the reduction of the government's external debt in absolute terms for the first time in 2005. Nevertheless positive developments in the public sector should be viewed objectively because in the circumstances of limited domestic savings the reduction in the government's net external liabilities results in redistribution, i.e. a rise in external liabilities of other domestic sectors, primarily banks. The government borrows from banks in the domestic capital markets, while banks partially finance their loans to the government from foreign sources.

**Figure 1** External Debt Structure by Domestic Sectors, 1988-2005

Source: CNB.

If external debt is broken down by users of bank loans in the country (the public sector, the corporate sector and the household sector) and if amounts obtained in this way are added to the direct borrowing of the said sectors abroad, we see that the public sector (general government, CNB and public enterprises) accounted for some 40% on average, private and mixed enterprises for some 42% and households for some 18% of the total external debt in the period from 2003 to 2005. Although the public sector accounted for a sizeable share of external debt over the period

in question, the greatest contribution to the rise of external debt came from the private sector, i.e. companies and households.

**Table 6** External Debt Structure and External Debt Growth, in %

	External debt structure			External debt growth		
	2003	2004	2005	2003	2004	2005
Public sector	43.9	39.9	36.3	31.3	13.6	7.3
Enterprises	39.9	41.9	45.0	41.1	55.0	70.3
Households	16.2	18.2	18.7	27.6	31.4	22.4

Source: CNB.

The said developments resulted in strong growth of Croatia's external debt in the **period from 2002 to 2005**, with the trend of lending to the domestic public sector being substituted by the **trend of lending to the domestic private sector** (primarily banks) **from private foreign sources**. Relative indicators and indicators of external indebtedness show that from a moderately indebted country Croatia became a severely indebted country in the period in question.

### 2.3 CROATIA'S EXTERNAL LIQUIDITY AND EXTERNAL INDEBTEDNESS INDICATORS

The ratio of external debt to GDP and the ratio of external debt to exports of goods and services are some of the major **relative indicators of external indebtedness of a country**. Both measures indirectly reflect the solvency of a debtor, that is, the ability of a debtor to service foreign liabilities that have become due. In reviewing these two indicators, the levels used are defined in the World Bank classification. Accordingly, a country is considered as severely indebted if the ratio of its external debt<sup>3</sup> exceeds 80% of its gross national income (GNI)<sup>4</sup> or exceeds the level of 220% of its exports of goods and services.<sup>5</sup>

<sup>3</sup> More accurately, under World Bank methodology, external debt is the current value of future principal and interest repayments of external debt at the end of a certain period. For the time being, this value for Croatia is not much different from the gross external debt balance.

<sup>4</sup> Gross national income is derived as a sum of gross domestic product and factor income account balance.

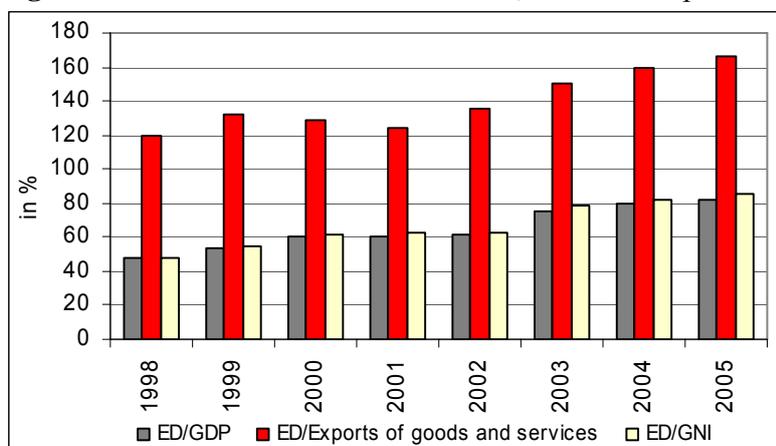
<sup>5</sup> Source: *Global Development Finance 2003*, World Bank, pp. 253.

**Table 7** Relative Indicators of External Indebtedness of the Republic of Croatia, in million euros

	1998	1999	2000	2001	2002	2003	2004	2005
Government	3,340	4,026	5,277	5,942	5,900	6,601	7,252	7,062
Croatian National Bank	244	218	215	215	23	366	2	3
Banks	2,195	2,135	2,196	2,547	3,790	6,121	7,702	8,990
Other domestic sectors	3,154	3,361	3,709	3,662	3,935	4,878	5,809	7,117
Direct investment	240	360	713	1,091	1,407	1,845	2,016	2,335
<b>Total</b>	<b>9,173</b>	<b>10,101</b>	<b>12,109</b>	<b>13,458</b>	<b>15,055</b>	<b>19,811</b>	<b>22,781</b>	<b>25,508</b>
<b>as % of GDP</b>	<b>47.6</b>	<b>54.1</b>	<b>60.6</b>	<b>60.7</b>	<b>61.5</b>	<b>75.5</b>	<b>80.2</b>	<b>82.4</b>
<b>as % of exports of goods and services</b>	<b>119.4</b>	<b>132.2</b>	<b>128.7</b>	<b>124.6</b>	<b>135.3</b>	<b>150.8</b>	<b>160.0</b>	<b>166.8</b>

Source: CNB.

The **ratio of external debt to GDP** totalled 47.6% at the end of 1998, while at the end of 2005 this indicator almost doubled – the ratio of external debt in GDP totalled 82.4% (85.1% of GNI). By the ratio of external debt to GDP, Croatia neared the critical line that divides severely from moderately indebted countries already at the end of 2003, when the ratio of its external debt to GDP totalled 78.7%. External debt grew at the strongest rate in 2003, both in absolute and relative terms. During the calendar year in question, Croatia's external debt, spurred by bank activity and financing of capital infrastructure projects, went up by EUR 4.8bn or slightly less than one fifth of its GDP.

**Figure 2** Share of External Debt in GDP, GNI and Exports of Goods and Services, 1998-2005

Source: CNB.

Exports of goods and services is the main source of foreign currency required for repayment of due foreign liabilities, therefore this second relative indicator of external indebtedness should be closely monitored. The **ratio of external debt to exports of goods and services** totalled 119.4% in 1998, while at the end of 2005 it reached 166.8% of the year's exports of goods and services. The said indicator deteriorated the most in 2003 (see Figure 2). Nevertheless, despite further mild deterioration in 2004 and 2005, it always remained below the critical limit that, according to the World Bank criteria, indicates possible difficulties in regular servicing of foreign liabilities. The relatively favourable ratio of external debt to exports of goods and services in Croatia may be attributed to large income from services rendered in tourism, which are expected to continue

growing over the following mid-term period. However, on the other hand, this income is highly sensitive to armed conflicts, terrorism, natural disasters etc.<sup>6</sup>

**Table 8** Share of External Debt (short-term trade credits included) in GDP and Exports of Goods and Services

	1998	1999	2000	2001	2002	2003	2004	2005
Government	3,340	4,026	5,277	5,942	5,900	6,601	7,252	7,062
Croatian National Bank	244	218	215	215	23	366	2	3
Banks	2,195	2,135	2,196	2,547	3,790	6,121	7,702	8,990
Other domestic sectors	3,154	3,361	3,709	3,662	6,039	7,058	8,371	10,228
Direct investment	240	360	713	1,091	1,407	1,845	2,016	2,335
<b>Total</b>	<b>9,173</b>	<b>10,101</b>	<b>12,109</b>	<b>13,458</b>	<b>17,160</b>	<b>21,990</b>	<b>25,343</b>	<b>28,618</b>
<b>as % of GDP</b>	<b>47.6</b>	<b>54.1</b>	<b>60.6</b>	<b>60.7</b>	<b>70.1</b>	<b>83.8</b>	<b>89.2</b>	<b>92.5</b>
<b>as % exports of goods and services</b>	<b>119.4</b>	<b>132.2</b>	<b>128.7</b>	<b>124.6</b>	<b>154.2</b>	<b>167.4</b>	<b>178.0</b>	<b>187.1</b>

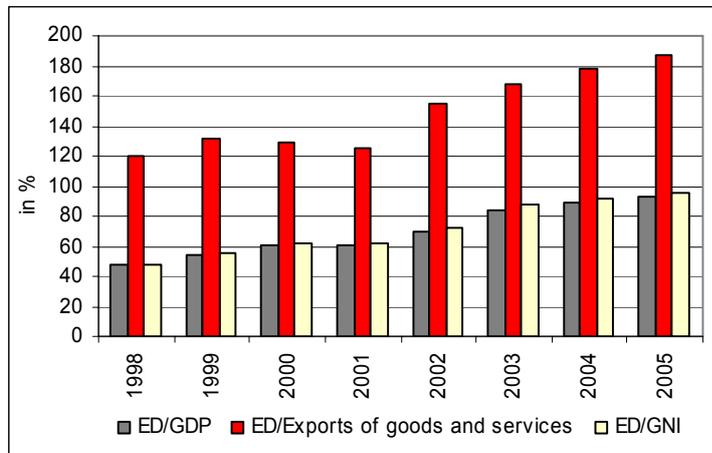
Note: From 2002 onwards, data on other domestic sectors include the estimated value of short-term trade credits.

Source: CNB.

In order to provide a complete picture, it should be noted that **Croatia's gross external debt statistics does not include the balance of short-term trade credits maturing in less than 6 months**, which were estimated at EUR 3.1bn at the end of 2005. Following the inclusion of short-term trade credits into the official external debt statistics, the ratio of external debt to GDP in 2005 rose by 10.1 percentage points compared with the ratio of external debt exclusive of short-term trade credits with maturity in less than 6 months to GDP, and totalled 92.5% of GDP (see Table 8). At the same time, the ratio of external debt to GNI totalled 95.5%, up 10.4 percentage points compared with the ratio of external debt to GNI exclusive of short-term trade credits with maturity in less than 6 months. The ratio of debt to exports of goods and services thus reached 187.1%, up 20.3 percentage points compared with the ratio that does not include short-term trade credits with maturity in less than 6 months. Although official data on external debt are analyzed in the text below, Figure 3 gives an overview of relative indicators that include estimated short-term trade credits with maturity in less than 6 months in the official debt balance.

<sup>6</sup> This became particularly visible in 1999, when Croatia's revenues from tourism reduced due to the Kosovo crisis.

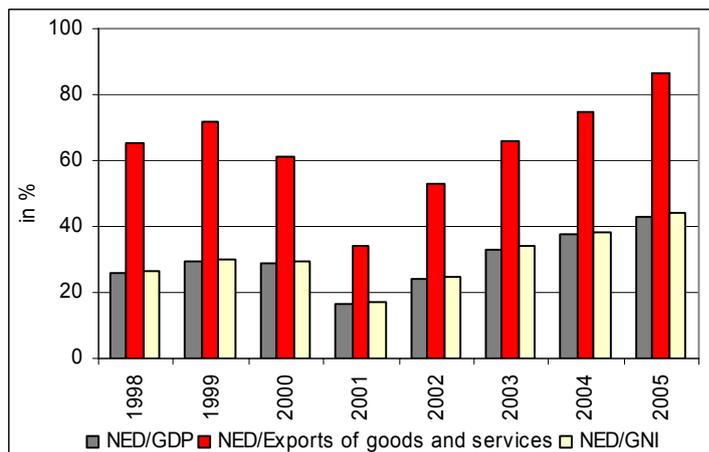
**Figure 3** Share of External Debt (short-term trade credits with maturity of up to 6 months included) in GDP, GNI and Exports of Goods and Services



Source: CNB.

An estimate of relative external indebtedness should also include indicators relating to the concept of net external debt. Net external debt is external debt reduced by the value of international reserves and banks' foreign assets that may be used in case of difficulties in international payments. **Net external debt** of the Republic of Croatia reached 42.8% of GDP at the end of 2005. Relatively high international reserves and banks' foreign assets provide for a relatively favourable estimate of external indebtedness. As it is visible in Figure 4, the ratio of external debt to GDP and the ratio of external debt to exports of goods and services have deteriorated uninterruptedly since 2001.<sup>7</sup>

**Figure 4** Share of Net External Debt in GDP, GNI and Exports of Goods and Services, 1998-2005



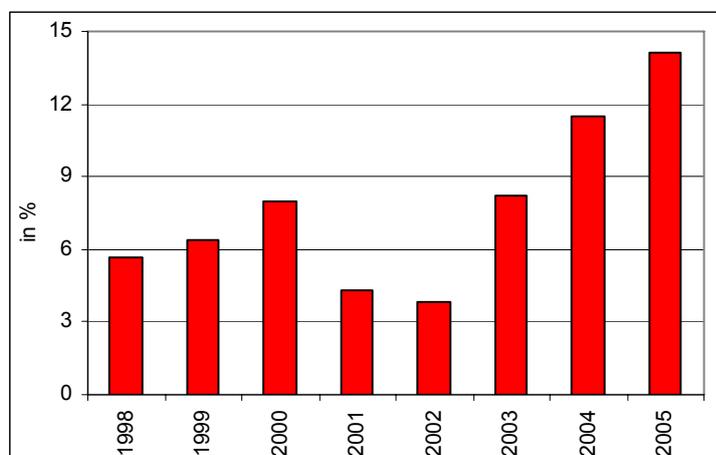
Source: CNB.

<sup>7</sup> A decline in relative indicators of net external indebtedness in 2001 was caused by relatively small absolute external debt growth year-on-year combined with the greatest increase in international reserves in the past ten years and strong growth of banks' foreign assets resulting from the inflow of foreign exchange deposits due to euro conversion.

Liquidity of a country also depends on the **maturity structure of its external debt**, which is an important indicator of external indebtedness. In case a country relies too heavily on short-term debt, it becomes more exposed to sudden changes in international capital markets as well as changes in the confidence of creditors. Based on this, it is possible to differentiate the maturity structure of external debt by original maturity and by remaining maturity. The structure of external debt by original maturity provides useful information on the terms and conditions at the time the debt was incurred, while the structure by remaining debt gives information on the burden of the upcoming principal and interest payments.

The **maturity structure of Croatia's external debt by original maturity** may be deemed as relatively favourable because short-term debt makes up for less than 15% of total debt.<sup>8</sup> However, it should be stressed that the major portion of banks' foreign liabilities arises from borrowing from parent banks and that potential shocks in the market could lead to cuts in the debt maturity as a way for parent banks to soften their increased operating risks. 2001 was marked by a decline in the ratio of short term debt to total debt as a consequence of the reduction in short-term government debt year-on-year, especially on the basis of loans (after 2001 the balance of the government's short-term foreign liabilities is almost negligible). On the other hand, the ratio of short-term debt to total debt has been on the rise since 2003, primarily due to the rise of short-term bank liabilities. A significant contribution to the rise in short-term liabilities in 2003 came also from placements of international reserves in repo instruments.

**Figure 5** Share of Short-Term External Debt in Total External Debt by Original Maturity, 1998-2005



Source: CNB.

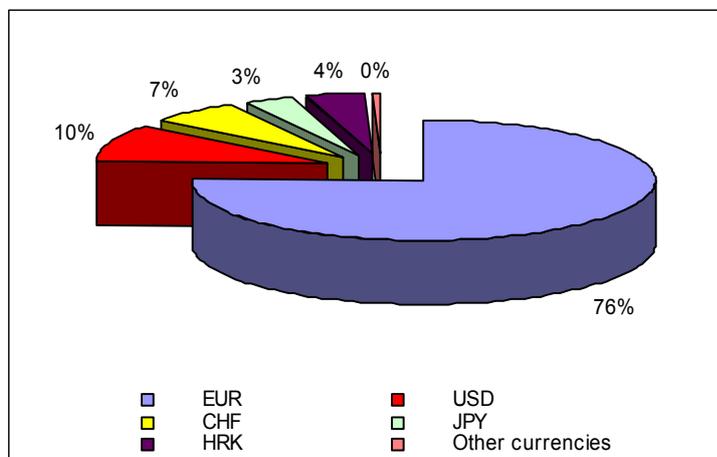
As for short-term **external debt by remaining maturity**, it should be stressed that over EUR 7bn worth of principal and interest becomes due for payment in 2006 arising from foreign exchange liabilities, or 20% of the projected GDP for 2006. As a result of the upcoming obligations arising from external debt servicing, in 2006 the ratio of short-term external debt by remaining maturity

<sup>8</sup> If external debt balance was to include the estimated short-term trade credits with maturity in less than 6 months, the share of short-term debt at the end of 2005 would total 23.5% compared with the share of 14.2% according to the official external debt data.

grew to as much as 28.4% of total debt, which is substantially more than indicator by original maturity. Nevertheless, it should be kept in mind that the projection of the principal and interest repayments was prepared in such a way as to include the entire amount of liabilities arising from banks' repo operations in the projection of principal repayments in the next quarter, which greatly increases maturities in the following year. In addition, it should also be noted that as from the end of 2005 the total amount of short-term cash and deposits is added to projected repayments over the first subsequent year, while previously it was included in the projected repayments over the period listed as "other", relating to the period after 2014.

The **currency structure** of Croatia's external debt shows that its largest share is denominated in foreign currencies, primarily euros and US dollars. At the end of 2005, a little more than a quarter of total external debt was denominated in euros, while some 10% was denominated in US dollars. The remaining share was denominated largely in Swiss francs and the Japanese yen. Over the past ten years the euro-denominated share has been rising noticeably, except in 2005 when borrowing in euros was partly compensated by borrowing in Swiss francs. The said changes are a reflection of the trends in bank borrowing, which to the greatest extent borrow euros from their parent banks and lately also Swiss francs. In contrast to the share of external debt denominated in euros and Swiss francs, the share of debt denominated in US dollars has been decreasing over the past ten years as well as the share of debt denominated in the Japanese yen. This was primarily a result of the reduction in the government's share of external debt, where debt denominated in US dollars and the Japanese yen has an above average share.

**Figure 6** Currency Structure of External Debt of the Republic of Croatia, as at 31 December 2005



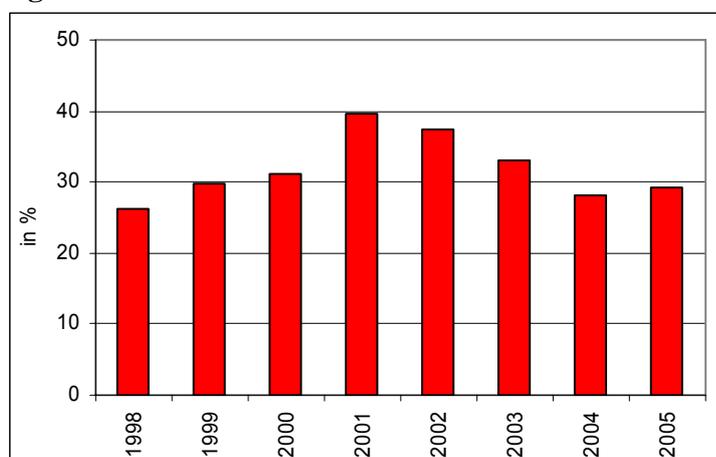
Source: CNB.

The fact that a substantial share of external debt is denominated in foreign currency underlines potential dangers from currency risk, that is, points towards potential difficulties in the repayment of foreign exchange liabilities that could arise from substantial foreign exchange fluctuations. In case of unexpected, strong depreciation (weakening) of the national currency, the burden of debt repayment in domestic currency will increase by the share of debt denominated in foreign currency. Therefore, it is considered that high level of debt denominated in foreign currency

increases the vulnerability of the country to shocks caused by the currency mismatch of foreign currency inflows and outflows.

As a result of a faster growth in international reserves relative to the debt growth in the 1999-2001 period, the **ratio of international reserves to external debt** improved. Nevertheless, this ratio deteriorated in subsequent years, since high growth rates of external debt exceeded the growth rate of international reserves. In 2005, reserves to external debt ratio stood at 29.2%. Since the common critical limit for this ratio is 20%, the debt coverage by reserves in the case of Croatia does not indicate that the Republic of Croatia's external liquidity is threatened. It should also be noted that, at end-2005, gross international reserves coverage stood at 5.1 months of imports of goods and services in 2005, which is also significantly higher than the common critical limit (value of three-months of goods and services imports).

**Figure 7** Gross International Reserves to External Debt Ratio, 1998-2005

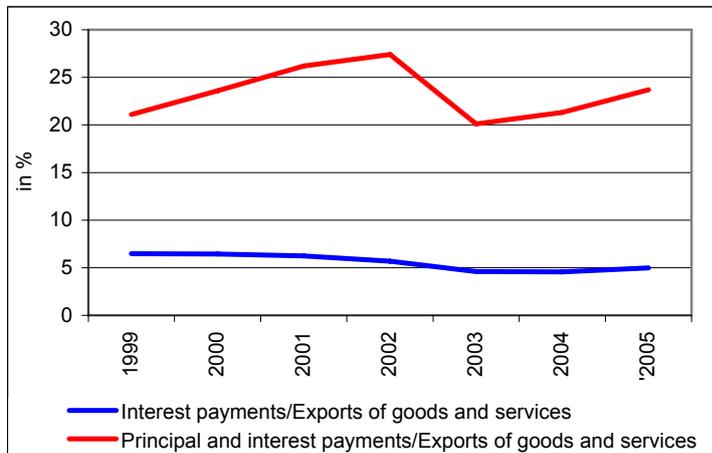


Source: CNB.

In addition to the relative indicators of external indebtedness, the debt burden may also be viewed on the basis of **debt flow indicators**, such as the **ratio of external debt service to exports of goods and services**. Following a decrease in 2003, the above stated indicator was on the increase (deterioration), standing at 23.7% in 2005, which implies that Croatia allocates slightly less than one-fourth of its total revenues from exports of goods and services to a repayment of principal and interest on external debt. The acceptable upper limit on this ratio is 30%, so that Croatia, according to this indicator, is not considered a heavily debt-burdened country. However, it should be pointed out that, according to the internationally accepted methodology, external debt servicing includes repayment of principal on a long-term debt, excluding repayment of principal based on trade credits and direct investments, and total repayment of interest, excluding repayment of interest based on direct investments. If the entire servicing of principal and interest were taken into account, the relative indicator in 2005 would reach 30.2%, which is the critical limit on this indicator. Another relative debt flow indicator is the **interest due on external debt as a share of goods and services exports revenue**, which has not been deteriorating significantly over the past few years, despite the debt growth. Such a development indicates that Croatia borrows on the external markets under increasingly more favourable terms. The critical level of this indicator is 20%, while in the case of Croatia, it averaged around 6% in the 1999-2005

period, implying that, according to this indicator as well, Croatia's current international liquidity is not threatened.

**Figure 8** External Debt Flow Indicators, 1999-2005

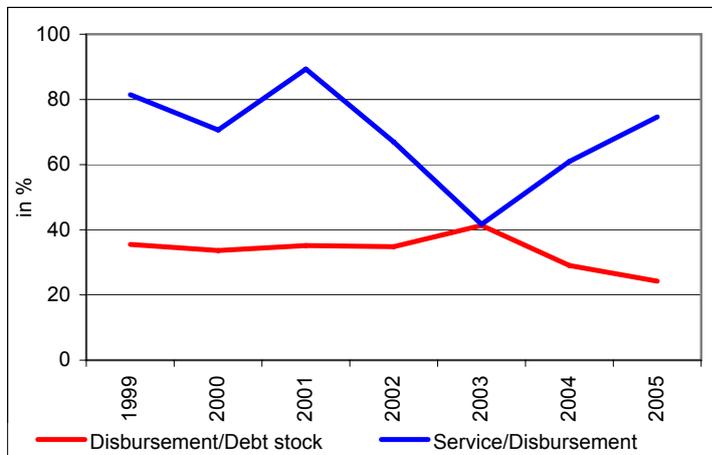


Note: Principal and interest payments include principal payments on long-term debt net of principal payments on trade credits and direct investments, as well as total interest payments net of interest payments on direct investments.

Source: CNB.

**The ratio of total external debt amortization to new disbursements** is an indicator showing whether and to what extent external debt is rolled over in a particular period. After its fall in 2002 and 2003 (as a result of a relatively low level of total debt amortization), the said indicator increased again in the following two years, reaching 74.6% in 2005. The indicator value below 100% points to the fact that new external debt disbursements are still larger than total amortization of due principal and interest, i.e. in another words, that debt is on the increase and that it is being rolled over. Improvement of the said indicator in 2004 and in 2005 can be accounted for by a strong annual growth in amortization of principal and interest (18.1% and 14.7%, respectively), while, at the same time, new disbursements recorded a decrease at the annual level.

**Figure 9** External Debt Service to New Disbursements Ratio, 1999-2005

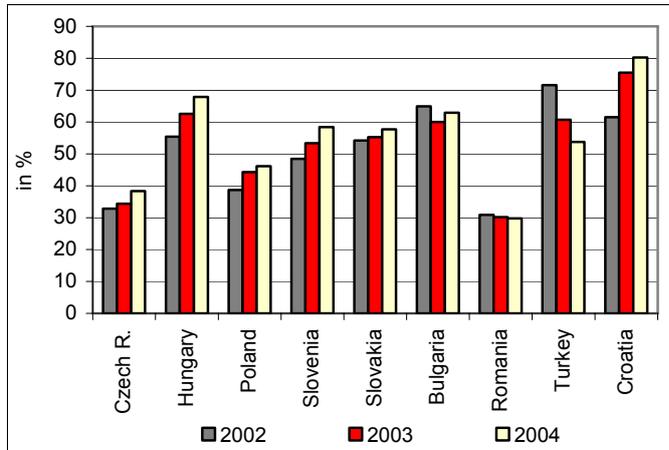


Source: CNB.

## 2.4 COMPARISON OF THE LEVEL OF INDEBTEDNESS IN CROATIA AND IN THE SELECTED COUNTRIES

The **comparison** of the external indebtedness indicators of the Republic of Croatia with those of the selected countries (the Czech Republic, Hungary, Poland, Slovenia, Slovakia, Bulgaria, Romania and Turkey), shows that **Croatia is the most indebted country**. According to the main indicator, external debt to GDP ratio, Croatia ranks first among the selected countries. Compared to the Croatia's share of 80.2%, the share of external debt in GDP in other observed countries was considerably lower in 2004, standing at 51.9% on average. Romania and Czech Republic had the lowest external debt to GDP ratio among the selected countries, the relative indebtedness indicator of Turkey recorded an annual decrease in the 2002-2004 period, while it stagnated in Bulgaria and Slovakia. **Croatia also recorded the largest average annual growth rate of external debt among the selected countries** of 19.2% in the stated period, while other countries recorded an annual growth that was twice smaller (8.6%), on average.

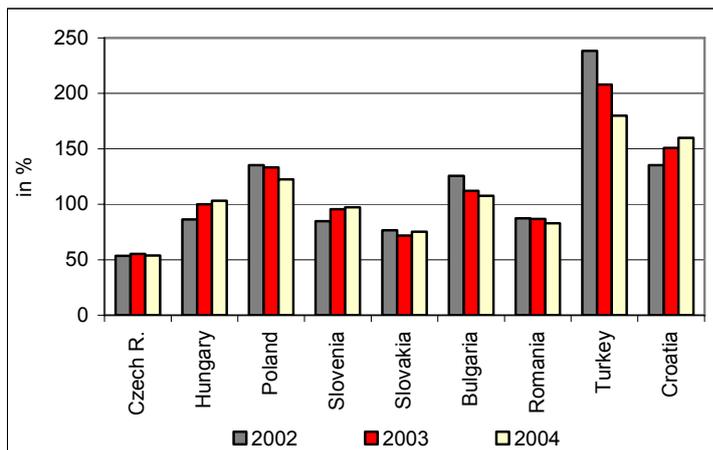
**Figure 10** Share of External Debt in GDP, 2002-2004



Note: Romania's external debt includes only the medium-term and long-term debt.  
Sources: Eurostat, central banks' web sites and CNB.

According to the second relative indicator, the ratio of external debt service to exports of goods and services, Croatia is the country with the most unfavourable indicator, if Turkey is excluded. By its share of external debt in exports of goods and services of 160% in 2004, Croatia is thus considerably ahead of the other observed countries where this indicator stood, on average, at approximately 100%. Viewed dynamically, the movements of this relative indicator for Turkey are more favourable than those for Croatia, since the share of the Turkish external debt in exports of goods and services fell significantly in the 2002-2004 period, while the Croatia's share of external debt in exports of goods and services was on the increase.

**Figure 11** Share of External Debt in Exports of Goods and Services, 2002-2004



Note: Romania's external debt includes only the medium-term and long-term debt.  
Sources: Eurostat, central banks' web sites and CNB.

## **2.5 EXTERNAL DEBT IN 2006**

The preliminary data show that in the first two months of 2006, external debt of Croatia further increased by EUR 0.7bn, reaching thus EUR 26.2bn at end-February 2006, or 84.6% of GDP in 2005.

Viewed by the borrower sector, it should be noted that the greatest portion of the external debt increase in January and February 2006 can be accounted for by commercial banks (including direct investments in banks), for which a debt growth of as much as EUR 743m was recorded during January and February 2006. External debt of banks thus reached EUR 9.9bn at end-February, its share in total debt thus increasing at the same time from 36.1% at end-2005 to 38% at end-February 2006. The annual growth rate of banks' foreign liabilities rose from 14.8% at end-2005 to 29.7% at the end of February 2006.

In addition, in the first two months of 2006 other domestic sectors (including direct investments in enterprises) recorded an increase in external debt of EUR 127m, most of which was incurred in February. Their debt thus reached EUR 9.4bn or 35.8% of the total external debt. A 2006 increase in debt of enterprises, mainly relates to a growth in late repayment of principal and interest and to an increase in liabilities based on long-term loans.

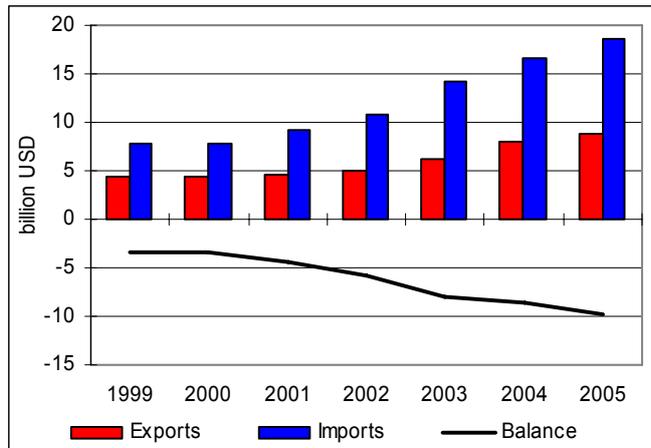
As opposed to banks and other sectors (enterprises), the 2005 positive trends of the government continued, so that in the first two months of 2006, a further decrease in external debt was recorded, both in absolute and in relative terms. An absolute decrease in the government's external debt can to the largest extent be accounted for by a significant repayment of principal and interest based on bonds issued abroad (regular settlement of liabilities to the London Club and repayment of Samurai bonds worth JPY 25bn), while new disbursements were considerably reduced at the same time.

## **3 CROATIA'S BALANCE OF PAYMENT MOVEMENTS**

### **3.1 SOURCES AND METHODS OF CURRENT ACCOUNT DEFICIT FINANCING**

A significant growth in external debt is closely related to a deterioration of another essential macroeconomic indicator - balance of payment current account balance. More specifically, high growth rates of banks' placements to the domestic sectors, especially to the household sector, reflected on a strong growth in personal consumption of mostly imported goods. The imbalance between goods exports and imports led to a strong deterioration of foreign trade deficit and, in turn, to a deterioration of the Republic of Croatia's balance of payment current account deficit. Current account deficit thus averaged around 5.8% of GDP in the 1998-2004 period, reaching 6.3% of GDP in 2005.

**Figure 12** Exports and Imports of Goods and Foreign Trade Balance



Sources: CBS and CNB.

In addition to the foreign trade deficit, **deficit on the factor income account** also contributed to a growth in current account deficit.<sup>9</sup> A deficit growth on this basis directly affects a growth in external debt, or servicing of due liabilities arising from interests on loans taken by the domestic sectors abroad, or interests on bonds issued abroad. The larger the external debt is, the larger the liabilities to repay the interest on external debt principal, which deepens the imbalance (deficit) in this account.

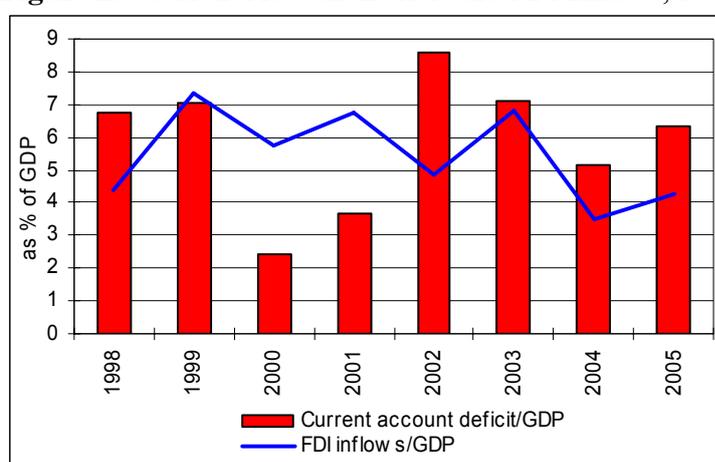
On the other side, **capital and financial account** of the balance of payment of the Republic of Croatia **shows the manner in which the current account deficit is financed**. When analyzing the movements in the financial account, the two fundamental categories should be distinguished: **foreign direct investments**, which mostly do not create external debt, and **portfolio (bonds) and other investments** (loans, trade credits and deposits), which reflect the external debt developments, since the balance of payment records transactions between residents and non-residents.

By mid-1990-ies, repatriation of household foreign exchange was the main source of capital inflow to Croatia, i.e. a return of foreign currency savings from abroad to the domestic banking system. After the beginning of a slow-down of household foreign currency repatriation (1997), borrowing abroad started to grow. Reaching of an agreement on debt rescheduling with the Paris and London Club and obtaining of a credit rating provided for the government, banks and domestic enterprises access to foreign capital markets. As a result of a more intense privatization of state-owned enterprises at the end of 1990-ies, foreign direct investments became an increasingly important source of current account deficit financing. Foreign direct investments are generally considered the most stable form of inflow, since they are based on long-term contemplation and interests of investors, who rarely withdraw from the country in case of possible crises. As regards other positive effects of foreign direct investments, a transfer of technology and other forms of technologically advanced knowledge and skills should also be mentioned. Although a large portion of current account deficit in Croatia was financed in individual years by the inflow of foreign direct investments (see Figure 13), they were, to a great

<sup>9</sup> Income account comprises compensation of employees and income from direct, portfolio and other investments.

extent, a result of privatization of enterprises in the service sector (especially in the banking sector and telecommunications). Only a small portion of direct investments accounted for the greenfield investments, i.e. establishment of companies the products of which could be offered in the future as the Croatia's export products, improving, in this manner, the imbalance between the Croatian exports and imports. It should also be stressed that, as the privatization process moves closer to its end, an increasingly smaller portion of current account deficit could be financed by this form of capital inflow. At the same time, a growth in direct equity investments that are not related to the privatization projects is expected in the future, as a result of the initiation of the negotiation process concerning the Croatia's EU accession. In this process, harmonization of the Republic of Croatia's legislation with the EU acquis and implementation of the required reforms should enhance attractiveness of Croatia for foreign investors. The burden of current account deficit financing will be lifted, i.e. a need for relying on foreign borrowing will be reduced, to the extent to which Croatia will manage to attract these direct equity investments.

**Figure 13** Current Account Deficit and FDI Inflows, 1988-2005



Source: CNB.

### 3.2 CURRENT ACCOUNT DEFICIT SUSTAINABILITY

There is not a single generally accepted level of current account deficit above which deficit would be considered unsustainable, and if a deficit of a country is at such a level, this also does not imply that that country will certainly be faced with the balance of payment crisis. As already mentioned, in the 1998-2004 period, the average current account deficit in Croatia amounted to 5.8% of GDP. In relation to the countries with comparable economic characteristics, only Hungary recorded a larger average deficit in the observed period, while similar deficits were recorded in Bulgaria and Slovakia. All other selected countries had considerably smaller current account deficit.

**Table 9** Current Account Balance in Selected Countries, as % of GDP

	1998	1999	2000	2001	2002	2003	2004	Period average
CROATIA	-6.8	-7.0	-2.5	-3.7	-8.6	-7.1	-5.1	-5.8
Czech R.	-2.1	-2.5	-4.9	-5.4	-5.7	-6.3	-5.2	-4.6
Hungary	-4.9	-7.8	-8.5	-6.1	-7.1	-8.7	-8.8	-7.4
Poland	-4.0	-7.4	-5.8	-2.8	-2.6	-2.1	-4.1	-4.1
Slovenia	-0.6	-3.3	-2.8	0.2	1.5	-0.3	-2.1	-1.1
Slovakia	-9.6	-5.7	-3.5	-8.4	-8.0	-0.9	-3.5	-5.6
Bulgaria	-0.4	-5.1	-5.5	-7.3	-5.6	-8.5	-7.5	-5.7
Romania	-6.9	-4.0	-3.7	-5.5	-3.3	-5.5	-8.4	-5.3
Turkey	1.0	-0.8	-4.9	2.4	-0.9	-3.3	-5.2	-1.7

Sources: Eurostat, CBS and CNB.

Apart from the Croatia's somewhat larger current account deficit compared to the average in the observed countries, the issue of structure of its deficit is also raised. More specifically, the countries with a stronger exports sector can more easily repay external debt, since a smaller portion of the total foreign currency inflow, generated by exports of goods and services, should be set aside for debt repayment. In terms of imports of goods and services as a percentage of GDP, Croatia is approximately at the level of the observed countries' average, while it slightly lags behind in terms of a relative indicator of exports of goods and services. At the same time, Croatia is the leading country as regards the exports of services, but is also the country with the most unfavourable results concerning the goods exports themselves (excluding Turkey).

**Table 10** Average Exports of Goods and Services in Selected Countries, 1998-2004, as % of GDP

	EXPORTS			IMPORTS		
	Goods	Services	Goods and services	Goods	Services	Goods and services
CROATIA	22.6	23.4	46.0	43.9	10.0	53.8
Czech R.	51.7	10.8	62.4	55.2	9.0	64.2
Hungary	54.1	11.6	65.7	58.4	10.0	68.5
Poland	23.4	5.3	30.7	28.6	4.9	34.2
Slovenia	45.5	9.8	55.3	49.1	7.5	56.7
Slovakia	58.8	10.6	69.4	65.2	9.4	74.6
Bulgaria	36.4	15.6	52.0	46.3	12.4	58.7
Romania	27.3	4.5	31.8	33.5	5.0	38.6
Turkey	19.4	9.0	29.1	25.7	4.2	30.4

Sources: Eurostat, CBS and CNB.

As regards the goods exports, the studies examining the issue of the Croatia's external competitiveness often point out the fact that, in addition to a dynamic growth in goods imports, primarily generated through a demand for consumer goods, Croatia moderately and gradually loses its share in the EU market. This may be accounted for by inadequate concordance and poor harmonization of the Croatian exports structure with the strict requirements of the EU market. Unfavourable performance of trade in goods can, among other things, be accounted for by relatively small investments in new export products based on knowledge and technology, but also

on other factors related to the competitiveness in the narrow and broad business environment (a lack of "more demanding" domestic market, shallow industrial clusters) and in the enterprise sector itself (management quality). It should also be noted that Croatia is still not a member of the Pan-European Origin Cumulation System, which is, to a certain extent, an obstacle to the Croatian exports of goods.

In the forthcoming mid-term period, a continuation of the EU integration processes should reflect positively on the Croatian exports of goods, which should be supported by the expected continuation of restructuring of domestic companies and a further increase in labour productivity. A continued, i.e. further growth in revenue from services rendered in tourism is also expected, as a result of increased accommodation capacity, extension of a tourist season and the expected continuation of investment in promotional activities and presentation of Croatia in the foreign markets. Accordingly, the balance of payment current account deficit will become more and more adjusted to the sustainable framework in the long-run, if along with revenues from tourism, revenues from goods exports grow to the same extent. On the other hand, if the present growth dynamics of the Croatian net imports of goods continues, it is difficult to expect considerable improvements in the Republic of Croatia's current transactions external imbalance in the near future.

### **3.3 ASSESSMENT OF A POSSIBLE IMPACT OF THE KUNA AGAINST EURO EXCHANGE RATE DEPRECIATION**

As regards the competitiveness of the Croatian goods exports, the issue of the central bank's exchange rate policy is often raised, as well as the assertion that the exchange rate of the kuna against euro is overvalued. It should be noted that the exchange rate of kuna against euro is determined by the supply and demand forces on the foreign exchange market, the central bank intervening only in case of large short-term exchange rate fluctuations. Although a weaker kuna exchange rate could effect the price competitiveness of the Croatian products in the foreign markets after a certain period of time, the issue of competitiveness depends, nevertheless, to the greatest extent, on the structural weaknesses of the Croatian economy. At the same time, numerous supporters of the kuna exchange rate depreciation, attach inadequate importance to one of the fundamental characteristics of the Croatian economy, i.e. a high level of euroization.

More specifically, regardless of the fact that over the last ten years the inflation rates recorded in Croatia were among the lowest in relation to the countries with comparable economic characteristics, a foreign currency was used in the entire period as a predominant means of storing the financial assets value. This could be accounted for by serious economic consequences of inflation in the Croatia's more distant economic past, which resulted in depletion of value or almost a complete loss of value of monetary assets. Consequently, and due to the fact that most of the financial liabilities of the economic entities in Croatia is directly or indirectly linked to the exchange rate, any more pronounced change in the value of domestic currency used to be accompanied by considerable costs. Accordingly, any proposal as to the change in value of the domestic currency, in the context of improvement of the overall economic activity (primarily a competitive position of exporters), should provide a comprehensive analysis of the impact of the overall changes. The problem which arises is economically and scientifically based quantification of net impact of a considerable exchange rate fluctuation, i.e. a simultaneous offsetting of

positive effects on exports with negative effects on imports of goods and services, and, perhaps even more important, offsetting with the effect of depreciation on foreign currency deposits and foreign currency indexed kuna deposits of domestic sectors and their corresponding loans with banks and a possibility of further timely settlement of foreign currency liabilities or foreign currency indexed kuna liabilities.

The effect of the kuna against euro exchange rate depreciation on the foreign trade balance arises from the fact that the exchange rate fluctuation effects a relationship between domestic and foreign prices, i.e. a change in foreign demand for domestic products and a change in domestic demand for imported products. The Marshall-Lerner theorem is applied here, according to which a devaluation of the domestic currency will effect positively the foreign trade balance of an individual country, if the sum of elasticities of demand for exports and imports of an individual country exceeds 1.

In the study relating to the determinants of foreign trade flows of the Republic of Croatia, Mervar (2003) attempts to assess, econometrically, income and price elasticity of the Croatian exports and imports. The results of the study show that relative prices, approximated by the real effective exchange rate index, do not have a significant role in determining exports (long-term price elasticity of demand for goods exports is only 0.1), while their effect is somewhat more pronounced in imports of goods (1.7). In other words, depreciation of domestic currency could only slightly contribute to a more intensive growth of the Croatian goods exports in the long-run, while goods imports would be affected to a greater extent. However, due to various limitations, such as insufficiently long time-series and frequent methodological changes, the obtained results should be interpreted with caution.

The economic theory and results of a number of expert studies also point to the fact that the exchange rate depreciation results, in the short-run, in deterioration of foreign trade balance (the so-called J-curve), which is primarily effected by the length of time for which the contracts were concluded, demand habit, etc. In the case of Croatia, the study of Stučka (2003) showed that as a result of 1% constant depreciation of the domestic currency, a short-term deterioration of trade deficit, as a consequence of the J-curve effect, could range between 2% and 3.3%. On the other hand, only after approximately 2.5 years, the trade balance could improve and the quantifications show that the improvement would range between 0.9% and 1.3%.

On the basis of the facts mentioned so far, it is evident that it is extremely difficult to provide an answer as to the impact of the exchange rate depreciation on the foreign trade balance which would include a dynamic component. Therefore, for the purpose of this analysis of external indebtedness, a very simplified simulation was developed which attempts to calculate the immediate effects of the kuna against euro exchange rate depreciation of 10% on the sample for 2005. The static approach shows that Croatian exporters of goods and services in 2005, *ceteris paribus*, would earn HRK 11.3bn more, while the holders of foreign currency deposits and kuna deposits indexed to foreign currency would be wealthier by HRK 10.0bn at the end of 2005. On the other hand, importers of goods and services would have to pay HRK 12.9bn more, debt of the domestic sectors to commercial banks in Croatia would increase by HRK 12.2bn and foreign liabilities of the government and enterprises would rise by HRK 12.0bn. This simplified analysis which, it should be repeated once again, is based on various limitations, points to the conclusion that the net impact of the initial kuna against euro exchange rate depreciation of 10% would be

extremely negative in Croatia and would amount to around HRK 15.8bn or approximately 7% of GDP for 2005.

**Table 11** Impact of 10% Kuna Depreciation on the Financial Position of Domestic Sectors in 2005 Computed Using the Approximate Statistical Approach, in million kuna

	Initial position	Position with 10% depreciation	Change
Value of exports of goods and services	113,190.9	124,510.0	11,319.1
Value of imports of goods and services	129,217.3	142,139.0	12,921.7
Difference	-	-	-1,602.6
Stock of foreign currency deposits and kuna deposits with a currency clause	100,186.3	110,205.0	10,018.6
Stock of foreign currency loans and kuna loans with a currency clause	121,628.4	133,791.3	12,162.8
Difference	-	-	-2,144.2
Stock of external debt of government and enterprises	120,230.8	132,253.9	-12,023.1
<b>Total net impact</b>	-	-	<b>-15,769.9</b>

Note: The value of flows refers to the whole 2005 year, while the value of stocks is as at end-2005.

Source: CNB.

When analyzing possible effects of the kuna against euro exchange rate depreciation by individual sectors, it should be noted that the banking system as a whole is not exposed to currency risk, at least not directly, which is confirmed by the indicators of the banks' permitted exposure to direct currency risk, prescribed by the central bank. This risk, for that reason, is not included in Table 11. However, commercial banks are exposed to indirect currency risk through their clients to which they have granted loans indexed to foreign currency, while their clients' income is mainly earned in domestic currency (for more details, see chapters below). The question thus arises what the effects of depreciation would be on the business performance and on the burden of repayment of the domestic commercial banks' clients.

A possible impact of the kuna depreciation on the business performance of entrepreneurs and on the burden of debt repayment of households may be approximated on the basis of the data on the operation of entrepreneurs subject to financial reporting (FINA) and CBS personal consumption survey.<sup>10</sup> According to these data, net aggregate income of entrepreneurs for 2004 (unconsolidated data) stood at HRK 13.6bn.<sup>11</sup> Assuming a 10% kuna depreciation, i.e. a corresponding increase in their foreign income and expenses, net income of entrepreneurs would amount to HRK 9.1bn, i.e. it would decrease by one third or by 2.1% of GDP. The average burden of household debt repayment in 2004 stood at 6%, representing the ratio of principal and interest repayment on loans and credits (HRK 6bn) to their disposable income, which amounted to HRK 100bn in 2004. Assuming that total household income was denominated in kuna and that their total liabilities were entirely indexed to foreign currency, a 10% depreciation would result in

<sup>10</sup> The main characteristics of household consumption and income from 2002 to 2004 from the Survey on Household Consumption No. 13.2.1 of 30 June 2005.

<sup>11</sup> Total income amounted to HRK 484.1bn and total expenses amounted to HRK 470.5bn.

a 0.6 percentage point increase of household debt repayment burden, or HRK 596m in 2004, resulting in a fall of the remaining gross disposable income of households of 0.3% of GDP.

There are a few more factors that could affect the stability of the domestic economy, in the event of kuna depreciation against euro. First, a "spillover" of the domestic currency depreciation to inflation is possible (the so-called pass-through mechanism), where a rise in domestic prices could cause appreciation of the real exchange rate. In the condition of a relatively large dependence of the domestic production on imports, a possible effect of kuna depreciation on the increase in import prices of intermediate goods cannot be disregarded. In addition, an increase in import and export prices may lead to a deterioration of the domestic real income, and a reallocation of resources from the sector of non-tradable into the sector of tradable goods can result in a salary gap in these sectors. At the same time, since the burden of settling foreign liabilities of the government (including domestic liabilities indexed to foreign currency) would increase considerably due to the kuna depreciation, a decrease in government consumption, which would take place in order to raise the funds necessary for timely settlement of increased liabilities, could have an adverse effect on the economy as a whole.

#### **4 STABILISATION OF EXTERNAL DEBT IN THE REPUBLIC OF CROATIA**

Despite the fact that any consideration of relative indicators and indicators of the flow of foreign indebtedness has shown that there are no universal limits that might point to a threshold which inevitably leads to debt crisis and damaging economic consequences for any country which has failed to control in time its foreign debt growth, it is indisputable that **the dynamics of Croatia's foreign debt growth in the past few years has been economically unsustainable**. The central bank is aware of that as well as of the difficulties involved in controlling the inflow of capital directly into companies and of the temporary success of any such restriction effort, so in the last few years it has attempted with a number of measures to slow down growth of foreign borrowing of banks, while taking care that such measures do not interfere with positive trends in the real sector of the economy.

##### **4.1 CNB MEASURES AIMED AT SLOWING DOWN DOMESTIC CREDIT EXPANSION FINANCED BY FOREIGN BORROWING OF BANKS IN 2003 AND 2004**

At end-December 2002, bank loans to households and to companies rose by 43%, and 22.7%, respectively, compared with end-December 2001. Total loans granted to households and companies rose by HRK 21.6bn or 31.2% in 2002. By contrast, demand deposits and savings deposits and foreign deposits rose by only HRK 9bn, or 9.2%, so in the absence of sufficient deposit inflow, the growth of placements was financed by means of an extremely large increase in foreign liabilities of banks. Foreign liabilities of banks rose by HRK 13,2bn or 60.2% in 2002, while banks further decreased their foreign currency assets, i.e. their funds abroad, by HRK 6.8bn or 20.8%. Such rapid developments in credit and monetary aggregates prompted the central bank to adopt strong measures to slow down sudden growth of bank loans actually financed by unlimited foreign sources of funds. The Council of the Croatian National Bank, at its session held on 15 January 2003, decided that further credit expansion of this type, in a situation where there

is no full control over budgetary deficit and current account deficit, might erode the country's macroeconomic stability.

Based on the expected economic growth and the expected growth of total liquid assets of banks in 2003, central bank management judged that a 16% growth of banks' placements to the non-banking sector would be sufficient to support economic growth in 2003. Such a growth rate would not deteriorate any further external position of the government or the country's attained macroeconomic stability. In accordance with such positions, the Governor of the Croatian National Bank issued on 15 January 2003 two decisions, introducing new measures of monetary and foreign exchange policy aimed at controlling credit expansion of banks (Official Gazette 10/2003).

The first of the two decisions, the **Decision on the Compulsory Purchase of CNB Bills**, or the "16% Decision", penalised banks whose placements to the non-banking sector grew too fast in a given quarter, by requiring them to buy 91-day central bank bills in an amount twice as large as the excess of lending over the 4% limit, at the end of the first quarter, 8% at the end of the second, 12% at the end of the third and 16% at the end of the fourth quarter, compared with the growth at the end of the previous year. Under the second decision, or the **Decision on the Minimum Required Amount of Foreign Currency Claims** ("35% Decision"), the banks were required to hold and maintain on a daily basis liquid foreign exchange assets of at least 35% of their foreign exchange liabilities which are included in the base for the reserve requirement calculation.

The CNB measures were designed in such a way as to employ profit mechanisms to affect banks. The higher the amount by which the determined quarterly growth rates of placements are exceeded, or the higher the share of foreign sources in total sources of banks, the smaller the net return on new placements to the non-banking sector. The said measures were also intended to act heterogeneously in such a way as to affect the most those banks whose business policies jeopardised the most plans made by the central bank to keep the growth of placements under control and to maintain continuity of foreign liquidity in 2003.

According to end-2003 data, CNB measures achieved the intended results. The annual growth rate of targeted placements of domestic banks to the private non-financial sector fell considerably, from 33.6% at end-2002 to 11.3% at end 2003.<sup>12</sup> Foreign currency liquidity of banks, as defined under the "35% Decision" also improved, rising from 31% towards end-2002 to 38% towards end-2003.

However, CNB measures failed to prevent further unfavourable developments in the country's external position. Rapid growth of foreign debt of all domestic sectors in 2003, particularly banks, led to, until that time, the largest annual net increase in total Croatian foreign debt, both in absolute and in relative terms (relative to GDP). In addition, around one half of the net increase in total foreign debt in 2003, expressed in kuna, could be attributed to the net increase in bank

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<sup>12</sup> The growth of targeted placements, as defined under the "16% Decision" amounted to 11.3%.. However, in the absence of data on their growth in the previous year, the growth of a close substitute, observed instead, rose by 9.8% in 2003. The substitute comprises placements covered by the "16% Decision" before increases for claims brought forward and before reductions for HBOR funded loans.

foreign debt, which almost doubled at end-2003, compared with end-2002 or rose almost eight-fold compared with end-2001.

The most probable cause for such developments was the fact banks found domestic funding sufficient only for financing their planned placements to the non-financial sector, but was not sufficient to meet the banks additional foreign currency liquidity as prescribed under the "35% Decision". Unwilling to change their ever decreasing interest rate policies and more favourable lending terms, particularly in the household sector, which had just opened up as a new and a very profitable market for banks' competition, the banks, in order to finance their other needs, including meeting monetary authority requirements, turned to foreign borrowing. As a result of such developments, placements covered by the "16% Decision" rose by 11.3%, with lending to the household sector rising by as much as 28% in 2003.

According to an analysis made in 2004, the growth of foreign liabilities of banks could have been 79% slower in 2003 had the banks reduced their household credit supply to the level that would ensure a 16% growth of such loans during the year, a rate targeted by the monetary authorities for 2003. The analysis also revealed the attempts made by banks to adjust to CNB measures by restructuring placements covered by the "16% Decision". The analysis of placements covered by this decision showed that the adjustment involved mainly a relative decline in the portfolio of risk securities and a very small relative increase in classic off-balance sheet items<sup>13</sup>, thus making room for the growth of placements, particularly to the household sector. There was an unexpectedly large slowdown in the growth of placements to domestic companies which fell from 32% in 2002 to 9% in 2003, well below the level of 16%.

Another modality of adjustment to CNB measures was also seen in the efforts of banks to turn to kuna sources of financing, to alleviate the effect of the 35% Decision on the price of bank financing. The share of kuna in total time deposits and received loans grew significantly in 2003, reflecting on deposit interest rates of banks on kuna sources of funds, which rose considerably in the second half of the year. This period saw up to then an unrecorded increase in kuna time deposits and received loans with a currency clause. Thus, for the first time in ten years, the growth of kuna time deposits and received loans (either with or without a currency clause) outdid the growth of foreign currency deposits and loans as sources of banks' funds.

Finally, in order to achieve compliance with CNB measures the banks transferred their loan transactions to companies connected with them in terms of ownership. Even though bank loans remained the most significant source of private sector financing, particularly its household subsector, the role of companies offering leasing grew in significance substantially in 2002 and 2003, and so did the role of direct foreign borrowing of domestic companies. Most of the owners of the largest leasing companies were owners of domestic banks (foreign banks). Therefore, when assessing the effects of CNB measures for slowing down credit growth to domestic non-financial private sector in 2003, one has to evaluate the increase in the supply of non-banking sources of finance. In that context, the fall in the growth rate of placements to the non-financial sector, which includes placements of domestic and foreign banks and placements of leasing companies, from approximately 26% in 2002 to 18% in 2003 may be seen as a success of monetary policy

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<sup>13</sup> Classic off-balance sheet items comprise: guarantees, letters of credit, bills of exchange and financing obligations including granted but unutilised credit lines.

measures, unless such fall reflects a correction of the previous excessive demand for loans, which was partly reigned in by a poorer credit supply of banks in the previous period.

Unfortunately, the success of monetary policy measures in 2003 was much greater when it comes to loans to the corporate sector than to household loans. The inclusion of loans granted by leasing companies notwithstanding, the success achieved in the corporate sector was still sizeable. CNB measures which enabled this slowdown in total domestic credit activity brought with them certain positive developments in terms of currency structure of banks' liabilities. In 2003, their kuna share rose by an amount which is close to the amount of increase in the foreign currency share, which in relative terms constitutes a considerably larger increase in the kuna component of banks' liabilities. On the other hand, a fall in the growth of bank loans to the non-financial private sector has not improved the country's external position. Quite the opposite, the year 2003 was marked by the fastest growth ever of foreign borrowing of all domestic sectors.

Therefore, until end-2003, the slowdown in credit growth of banks did not lead to the expected stabilisation of the relative size of the country's foreign debt. The attempts of banks to circumvent monetary measures also did their part in decreasing significantly the efficacy of the "16% Decision", which was later repealed (after 2003). By contrast, "the 35% Decision" which ensured to the banks a foreign currency cushion against unexpected capital outflows, achieved its objective, and remained in effect after 2003. As a result, the CNB analysed in mid-2004 additional measures that might be introduced to slow down foreign borrowing of banks.

These analyses rested on the assumption that foreign debt rises due to a difference between higher domestic and lower foreign interest rates. Interest rate spread is firstly a real rather than a monetary phenomenon. Relative scarcity of capital in Croatia compared with abroad, expected Croatia's gradual approximation and accession to the European Union, faster economic growth in Croatia compared with the EU, all these are factors which attract foreign capital to Croatia. Given that this is not a monetary but a real phenomenon, it was believed that conventional monetary policy measures could have little, if any effect.

It has also been established that foreign financing of domestic placements enabled Croatian banks in foreign ownership to make large profits owing to a large spread between interest rates these banks pay on sources of funds abroad and interest rates they charge on the domestic market. For instance, in 2003 and 2004, domestic banks in foreign ownership borrowed from their parent banks (or other foreign banks with which they are connected in terms of ownership through their parent bank) at an average interest rate which equals a 6-month EURIBOR increased by 0.40 to 1.50 percentage points (2.5% to 4%). At the same time, weighted interest rates on kuna household loans and loans to corporate sector ranged between 9.85% and 11.5%.

The CNB considered the possible effects of the following measures: changes in the instruments of reserve requirement and minimum foreign currency liquidity, introduction of capital controls and marginal reserve requirement and increase in the capital adequacy ratio by means of additional provisions for currency-risk exposure of banks' clients. The analysis has shown that introduction of the marginal reserve requirement would be most effective in terms of slowing down foreign borrowing of banks as this instrument combines in itself the desirable effects of the instrument of reserve requirement, minimum foreign currency liquidity and capital controls. The **marginal reserve requirement** is the unremunerated compulsory amount of foreign currency

deposited to a foreign currency account with the central bank for an undetermined period of time. The amount of deposit is determined as a percentage of the basis represented by cumulative increase in foreign liabilities of banks compared with the base period.

The advantages of marginal reserve requirements over all other possible measures seemed manifold. Firstly, by aiming solely at an increase in foreign liabilities and not its balance, it is a direct measure, which facilitates evaluation of its efficacy. Secondly, holding deposits in an account with the central bank would help prevent avoidance of the "35% Decision", a practice common in the past. Thirdly, the indeterminate period of implementation of this measure ensures central bank control over net foreign borrowing of banks as long as it deems there are pressures towards its increase. And fourthly, by changing the percentage of marginal reserve requirement allocation, the central bank can fine tune this instrument in such a way as to achieve optimum results, without running the risk of undesired consequences that often result in adjustment of broadly defined classical forms of reserve requirement.

In order for the marginal reserve requirement to achieve the said effects, it was necessary to determine the optimal percentage of allocation. Given the existing CNB monetary measures and instruments, as well as its previously described objectives, and data on relevant interest rates, an allocation percentage of 24% was set, thus fully meeting the requirement of minimum foreign currency liquidity (35%) on any increase in foreign liabilities of banks by means of funds allocated to the account of foreign currency requirements (11%) and to the account of marginal reserve requirement with the central bank (24%). The effect of MRR on bank liquidity was neutral at the beginning. However, the nature of this measure sent clear enough signals to the banks that the CNB is ready to respond without hesitation to any unfavourable developments in foreign liabilities of banks by increasing the rate of MRR allocation above its neutral level of 24%.

#### **4.2 CNB MEASURES FOR SLOWING DOWN FOREIGN BORROWING OF BANKS, FROM 2005 ONWARDS**

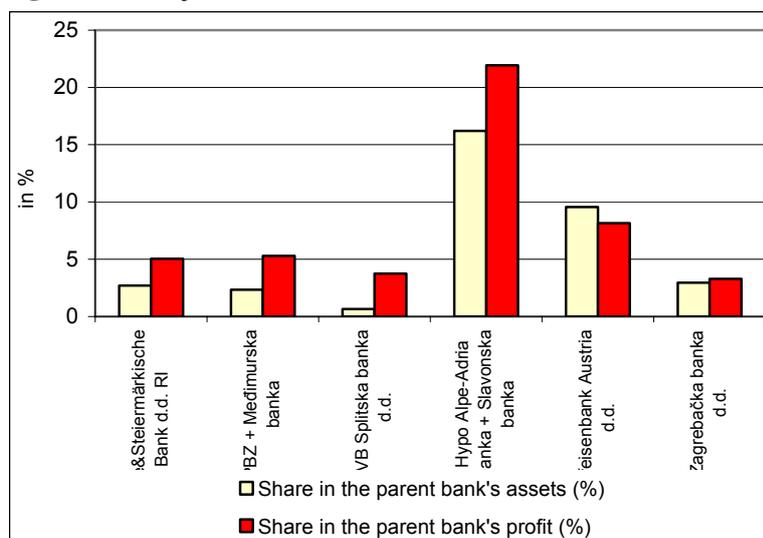
Unfortunately, banks failed to adjust their business policies with the objectives of monetary policy, so even after the MRR introduction, the size of the accumulated foreign debt continued to be an equal issue of concern as the rate of its growth. The debt rose from 61.5% of GDP at end-2002 to 80.2% of GDP at the end of 2004. In response, the central bank raised the rate of MRR allocation from 24% to 30% in February. Temporary further jumps in foreign debt level in 2005 prompted the CNB to continue raising the rate of MRR allocation, first to 40% in May and then to the current 55%, with a simultaneous widening of the base, in December. The significance of the 55% MRR allocation rate lies in the fact that the initial analysis made before MRR introduction in mid-2004, had identified this rate as the rate at which banks' foreign borrowing is on the verge of profitability. Therefore it is reasonable to expect that the marginal reserve requirement will not give its first real results until 2006. The reason for the gradual increase in this rate from the initial 24% to the present 55% should be sought in the fact that any sudden introduction of such a radical measure would surely have a destabilising effect on credit supply of banks which would in turn have a negative impact on overall economic activity.

In addition to raising its MRR to 55%, and widening its calculation base, the CNB cut the rate for the minimum foreign currency liquidity from 35% to 32% in early 2006, to enable government domestic borrowing needed for the settlement of the government's foreign liabilities, by engaging the existing foreign currency funds of banks. The banks were thus able to finance the government without resorting to further borrowing abroad.

Therefore, in addition to the current, highest planned rate of MRR allocation of 55%, the CNB stands ready in 2006 to take any other, until now unused measures, to combat the growth of foreign debt, particularly that of banks. The CNB will also take measures to prevent banks from dodging the existing monetary policy measures, including the MRR. In that context, the CNB has already adopted a decision in 2006 on a 55%, interest-free, allocation of the special reserve requirement to an account with the CNB on the funds of banks raised through securities issues in the country. With this measure, the central bank forestalled the announced sale of debt securities by banks on the domestic market. It was clear right from the start that the sale of such securities to clients who would obtain the needed funds from foreign banks or the sale of such securities to foreign banks on a secondary market, would provide for the banks a relatively cheap way out of the obligation to pay the marginal reserve requirement on funds actually obtained from abroad.

Optimism regarding the success of monetary measures in 2006 is based on several observations. Firstly, as mentioned previously, the level of MRR allocation rate is set at a level which eliminates profit as one of the two motives for further aggressive inflow of foreign capital into Croatian banks. The only remaining motive for banks is to increase their market shares (involving direct instantaneous losses) to secure a favourable position before some future monetary policy loosening takes place, so they can then resume their highly profitable operations. This is why this measure should prove efficacious for all those banks which take account of their current profitability. For others, additional measures will be needed as shown by higher profitability of the selected six major Croatian banks/banking groups compared with foreign banking groups they belong to. Five of the six observed Croatian banks have higher shares in the profits compared with their shares in the assets of their groups. The remaining one bank has equal shares in both the profits and the assets of the group (Figure 14). This leaves room for a certain number of banks to increase additionally their market shares to the expense of profitability.

**Figure 14** Major Banks' Shares in Assets/Profit of their Ownership Groups in 2005



Sources: Central banks' web sites and CNB calculations.

One of the reasons for high profitability (Table 12) of large Croatian banks in foreign ownership lies in significant bank portfolio improvement in the past several years, with this trend slowing down only since 2005. As regards the structure of placements in terms of their recoverability, the share of fully recoverable placements increased by 0.6 percentage points in 2005 and accounted for 96% of total placements at year-end. Banks' provisions for risky placements declined at the same time. Another reason for high profitability of these banks might lie in oligopolic structure of the banking market as the six banks/banking groups mentioned above account for 85% of the total banking system assets.

**Table 12** Certain Operating Indicators of Six Major Croatian Banks/Banking Groups and their Ownership Groups

	Share in the parent bank's assets (%)	Share in the parent's bank profit (%)	ROA (%)	ROA (%) parent bank	ROE (%)	ROE (%) parent bank
Erste&Steiermärkische Bank	2.70	5.05	1.55	0.83	20.15	14.74
Privredna banka+ Međimurska banka	2.34	5.29	2.03	0.90	17.64	18.10
HVB Splitska banka	0.64	3.75	1.58	0.27	18.24	4.23
Hypo Alpe-Adria-Bank + Slavonska banka	16.21	21.92	1.31	0.97	10.39	18.68
Raiffeisenbank Austria	9.56	8.15	1.39	1.63	19.50	16.86
Zagrebačka banka	2.95	3.29	1.86	1.67	16.13	20.79

Sources: Central banks' web sites and CNB calculations.

The third, and from historical point of view, probably the most important factor for high profitability of foreign banks in Croatia lies in their very high lending interest rates compared with those in the home countries of their owners. Recent developments have shown a fall in interest rates in Croatia, causing a narrowing between lending and deposit interest rates and smaller interest rate spread for the banks. However, the differences between these two rates are still sufficient to ensure profitability (Table 13). It should also be mentioned that in Croatia, similarly as in the home countries of owner banks of Croatian banks, interest rates on household

loans are noticeably higher than those on corporate loans. However, this is not true of deposits. Interest rates on corporate deposits in Croatia are much lower than on household deposits, compared with Europe where these rates tend to be more uniform.

**Table 13** Selected Lending and Deposit Interest Rates in December 2005

	EMU	Italy	Austria	Croatia
Deposits:				
Household - with maturity of over 2 years	2.2	3.36	2.67	4.85
Corporate - with maturity of over 2 years	3.53	-	3.66	2.51
Loans:				
Household - with maturity of over 5 years	4.01	4.67	4.74	6.95
Corporate - with maturity of over 5 years	3.93	3.51	3.63	5.02
Spread (loans - deposits):				
Household - with maturity of over 2 years	1.81	1.31	2.07	2.1
Corporate - with maturity of over 2 years	0.4	-	-0.03	2.51

Notes: Long-term interest rates on euro-denominated loans and deposits are compared. In case of Croatia, interest rates on loans and deposits maturing in over three years are shown.

Sources: Central banks' web sites and CNB calculations.

Finally, large differences between business operations of foreign banks in Croatia and in their home countries had until a few years back also involved more rigid lending terms for borrowers in Croatia. As shown by surveys conducted by the CNB every two and a half years, the Croatian banks until recently required abundant security to secure their placements. In case of household lending, numerous guarantors were required and large mortgages were not unusual. With time, the Croatian banks, pressed by heavy competition, loosened their criteria for granting loans and became more flexible in terms of instruments of collateral they accept to secure their loans. Part of household credit growth can thus be ascribed to easier loan accessibility. The institute of household loan guarantor, for instance, previously common essential element of collateral for banking loans in Croatia, has been moving gradually to extinction. Similarly, the ratio between the mortgage of tangible property and the amount of loan has fallen considerably and currently stands at little over 1.

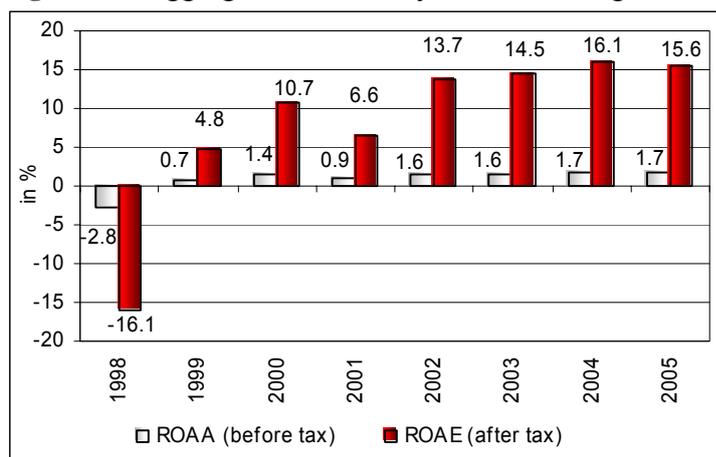
As far as corporate lending is concerned, it might be said that the Croatian banks have started placing more emphasis on qualitative indicators of borrowers. So, for instance, long-term relations which banks develop with their corporate customers are now valued greatly. Companies are also required to provide longer time series of financial reports and in case of project financing, an investment study is increasingly becoming an inevitable instrument of security.

Another observation which points to expectations of stabilisation of foreign indebtedness of banks until end-2006, lies in market expectation of a halt in interest rates fall of domestic banks during 2006, or even their increase, which is expected to contribute, through fallen demand, to further slowdown of credit growth of banks, which came to a brief halt during 2005. The analysis of the three main factors behind banks' interest rates seems to point towards a halt in interest rates fall of Croatian banks until end-2006.

The first factor, market competition of banks, will surely continue to provide encouragement to bank interest rates fall. The reason for that, as stated previously, lies in aggregate profitability of the banking system which still leaves sufficient room for price competitiveness in the area of lending interest rates, as seen in net interest income increase of 9.3% in 2005, compared with

2004, and a simultaneous increase in after tax profit of 11%. However, the effect of this factor may also be expected to continue to wane, given that the measures of relative aggregate profitability of banks stagnated for the first time in 2005. In 2005, banks' return on average equity (ROAE) was 15.6%, half a percentage point below that in 2004. Return on average assets (ROAA) also declined somewhat; from 1.68% in 2004 to 1.67 in 2005. This means that any continuation of the trend of interest rate fall might soon start eroding banking system profitability (Figure 15).

**Figure 15** Aggregate Profitability of the Banking Sector Assets and Capital



Source: CNB.

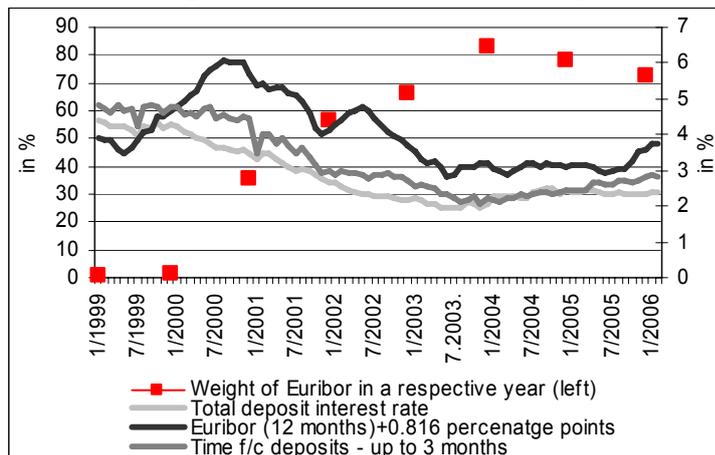
With all bank placements' risk indicators either holding steady or moving down at a slower rate, the second interest rate-related factor, reduced risk exposure of bank clients, is most likely to produce a neutral effect on interest rates. Down from 23% at end 2000 to 9% at end 2003, the share of estimated bank losses arising from placements to private enterprises more than halved in that period, rising at a slower pace until end 2005, when it stood slightly above 6%. The share of estimated bank losses arising from placements to households, having fallen sharply from end 2000 to end 2002, held steady above 3% in the following three years, declining to 2.8% at end 2005.

However, the third factor, the expected increase in eurozone interest rates and continued restrictive monetary policy measures, is certain to have a positive effect on interest rate growth. Despite the cautious ECB officials' statements from early this year, signalling that the ECB has no intention to start a long series of increases in the key interest rate after the fashion of the Fed, due to inflation exceeding the target rate, the ECB did lift the key rate by 25 base points, to 2.25%, in December 2005, repeating that in March, and the market is expecting eurozone interest rates to rise to 3% until the year end. The price of banks' foreign borrowing would in that case increase by a whole percentage point over 2006, with Euribor starting to prevail as the benchmark interest rate for Croatian banks' foreign borrowing.

As shown by the available CNB data for December 2005, banks most often borrowed from their parent banks based on the formula EURIBOR + spread. The spread amounted to an average of 0.927 percentage points, with the weighted average being 0.816 percentage points (that spread

usually stands below 2 percentage points). Although EURIBOR is currently the rate that banks most often use while borrowing from their owners, some banks receive interest-free loans from their parent banks, some still charge interest based on the formula LIBOR + spread, and some charge a fixed rate

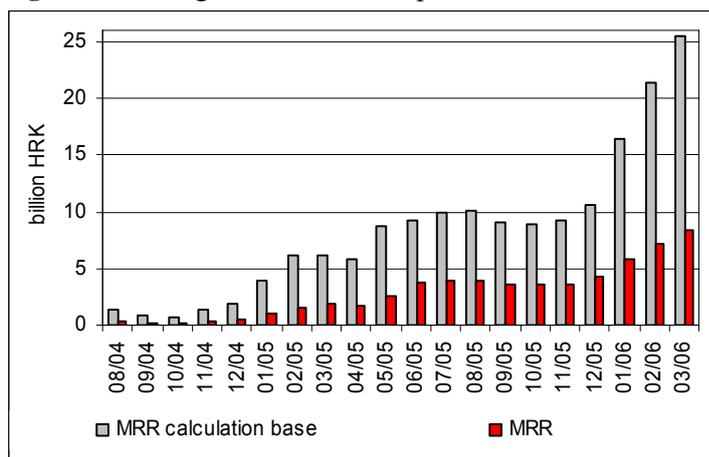
**Figure 16** Interest Rates Applied by Parent Banks on Croatian Bank Borrowings from 2001 Onwards, Comparable Interest Rates and Weight of Euribor as the Benchmark Interest Rate



Source: CNB.

The CNB's monetary policy will in 2006 follow ECB's monetary policy trends with respect to interest rates. Specifically, the CNB has repeatedly declared that its goals related to curbing banks' credit expansion, primarily financed by foreign borrowing, had been defined already in 2003. Accordingly, with all the key factors for determining interest rates in Croatia having been established, it can be concluded that their reduction trend should be stagnating in 2006.

**Figure 17** Marginal Reserve Requirement, at current rate of exchange



Source: CNB.

The latest increase in the marginal reserve requirement has pushed up the interest rate that commercial banks have to charge in order to achieve a positive return on funds acquired from

abroad. Specifically, with the 40% MRR rate banks had to generate a return of about 8% on euro-denominated foreign sources of funds to cover their expenses, i.e. interest paid on funds acquired from abroad. With the MRR rate up to 55%, the minimum required return on the placements of funds acquired from abroad is about 12%. This was the reason for the increase in lending interest rates recorded in the first two months 2006. The weighted interest rate on short-term kuna household loans not indexed to foreign currency thus reduced from 14.19% in December 2004 to 11.26% in December 2005, but rose to a high 12.84% in January, edging down in February. Similar trends were observed in weighted interest rates on short-term corporate loans not indexed to foreign currency, while the interest rate on time foreign currency deposits held steady at the end-2005 level, its record level in the previous two years. Interest rates on kuna deposits, especially foreign currency indexed corporate deposits, accelerated in the first two months 2006.

However, further interest rate trends cannot be projected with certainty, as it can be expected that the group of larger banks, still competing to increase their market shares, will be showing in the early stage after the tightened measures have taken effect some resistance to the short-term negative effects on profitability possibly arising from this competition. Additional measures that the CNB might be implementing in 2006 need to be targeted exactly at these banks.

In conclusion, there is a chance that the discontinued easing of credit worthiness requirements will contribute to a deceleration in loan demand, while the interest rate increase may possibly, after a long period of time, again boost domestic savings. Should this scenario materialise, its twofold positive effect on slowing down banks' foreign borrowing would be evident in their lowered requirements for both credit growth financing and foreign financing. However, this is not to say that the CNB is meanwhile to implement monetary policy measures aimed only at increasing these effects. In other words, it is very likely that the country's external vulnerability stemming from the high external debt level has not been the only consequence of the sharp increase in bank lending in the last four years. More specifically, with banks' foreign sources of funds as a rule being foreign exchange denominated and bearing variable interest rates that domestic banks cannot influence, their growing share in banks' liabilities should have exposed banks to increased foreign currency and interest rate risks. However, in a move typical of the Croatian banking sector, domestic banks have almost completely transferred foreign currency and interest rate risks generated by foreign borrowing to their clients.

**Table 14** MMR Impact on the Required Interest Rate on Bank Placements in Croatia, by type of source

SOURCES OF FUNDS	Interest rate on sources of funds (%)	Reserves with the CNB per 100 units		Liquid foreign currency claims	Units available for placement	Required interest rate*
		RR	MRR			
Foreign liabilities (EUR)	3.5	17	55	0	28	12
<i>Foreign liabilities (EUR), MRR 40%</i>	3.5	17	40	0	43	7.8
Foreign liabilities (CHF)	1.5	17	55	0	28	4.9
Household kuna deposits	4.1	17	0	0	83	4.8
Household foreign currency deposits (EUR)	3.2	13.6	0	26.9	59.5	3.8

Note: The estimate is based on the additional sources of financing (MRR rate of 55% is applied). The cost of the sources of funds reflects the estimate of the current interest rates by the type of source. Liquid foreign currency claims comprise the short-term assets that banks are required to hold in accordance with the Decision on the Minimum Required Amount of Foreign Currency Claims. The required return is the interest rate which banks have to earn in order to cover the cost of the sources of funds, while meeting the existing CNB measures. The calculation does not include other operating costs.

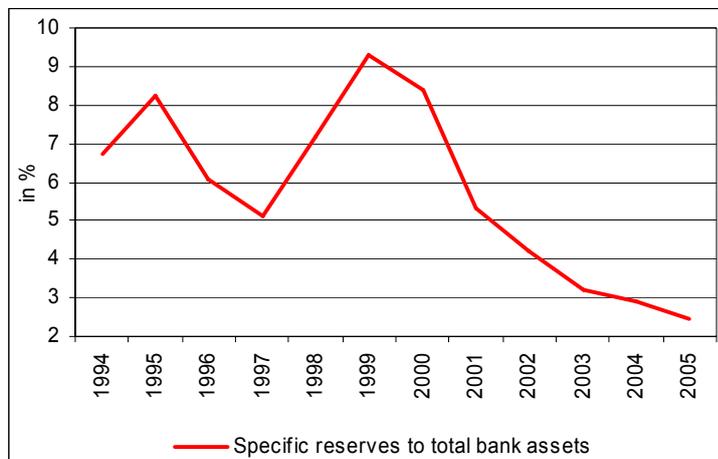
\* Interest rate on the available funds that covers the cost of the sources of funds.

Source: CNB.

Specifically, foreign currency denominated and foreign currency indexed loans account for about 88% of all bank loans, a share that has continued to rise. In addition, the share of fixed interest rate loans in total bank loans stagnated around a low 15% in 2005. In this way, by transferring foreign currency and interest rate risks to their debtors, domestic banks have secured considerably more stable earnings and provided for a facilitated risk management, for as long as interest rates and the exchange rate remain relatively stable, i.e. for as long as their developments have no effect on bank debtors' orderly repayment of loan obligations. In addition, the share of non-performing placements in banks' contingent liabilities has gradually diminished from a high 10.3% in 1999. Accordingly, although the risks banks are exposed to, either directly or indirectly via their clients, failed to manifest during the accelerated bank lending in the previous three year, they still exist.

The fact that bank debtors' position has not deteriorated in such a long period is primarily attributable to continued sound economic growth in a relatively stable political and macroeconomic environment, which has also been undergoing improvements, in line with the requirements arising from Croatia's approaching European integrations. However, it would be risky to take for granted these positive trends in indicators of banks' non-performing placements, as can best be illustrated by the trends in the share of special provisions, formed by banks to cover these non-performing placements, in total bank assets. The downward trend in the share of special provisions observed after 1999 is very similar to that recorded in 1996 and 1997, which proved unfounded in the period of banking sector disturbances and recession that was to follow in 1998 and 1999 (Figure 18).

**Figure 18** Decrease in the Relative Level of Bank Specific Provisions in the Period Before and After 1999



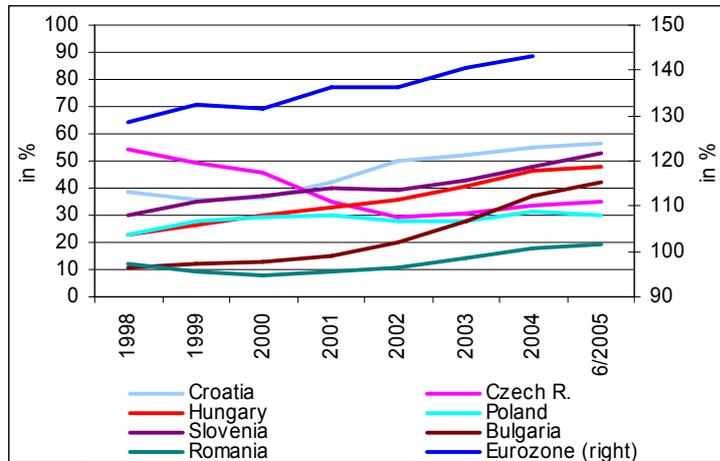
Source: CNB.

For these reasons, the CNB Council in December 2005 enacted the amendments to the decisions on the capital adequacy of banks and the classification of placements and contingent liabilities of banks, which, in addition to harmonisation with international accounting standards, require banks to give more consideration to their exposure to the foreign currency related credit risk (i.e. the credit risk banks are exposed to owing to foreign currency risks that their debtors are exposed to due to their liabilities being foreign currency denominated and income kuna denominated). This, *inter alia*, implies the 25 percentage point increase in the risk weight of foreign currency and foreign currency indexed loans, granted to debtors whose foreign currency income falls below 80% of their foreign currency liabilities. With this, the CNB also obliged banks to integrate into their credit policies, by mid 2006, the procedures for measuring, monitoring and limiting the foreign currency related risk their credit portfolios are exposed to.

When comparing Croatia's banking system to those of similar countries, based on standard features, e.g. the shares of loans and deposits in gross GDP, one can conclude that it is superior in terms of its integration and development and that, according to relative indicators, it has approached the banking systems in the eurozone.

Almost during the whole observed period from 1998 to June 2005, Croatia had the highest share of bank loans granted to all sectors excluding the financial sector (i.e. the non-financial sector, see Figure 19) in GDP of all countries with comparable characteristics. With the exception of the Czech Republic, this share was initially the highest exactly in Croatia, with this difference in relation to other countries remaining in the following years. The share of total loans in GDP has been on the increase in all countries, with the credit boom occurring in most new EU members and EU candidates.

**Figure 19** Changes in the Share of Bank Loans to Non-Financial Sector in GDP

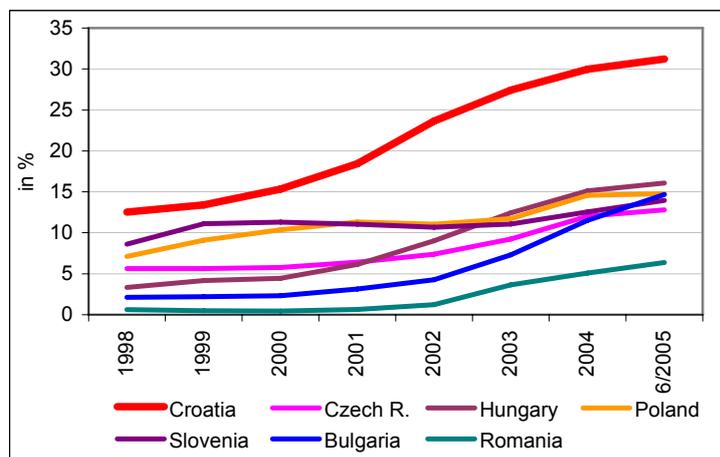


Note: Data for Croatia cover the whole 2005 year.

Sources: IFS, central banks' web sites and CNB.

In 2005, the share of total bank loans granted to the non-financial sector in GDP was 56.8%. This share is still below the eurozone average of above 140%. Croatia especially outperforms other countries by the amount of loans granted to the household sector, as their share in GDP has reached one third, twice exceeding the indicators of other countries of comparable characteristics (this indicator for the eurozone stands at 55%).

**Figure 20** Changes in the Share of Bank Loans to Household Sector in GDP



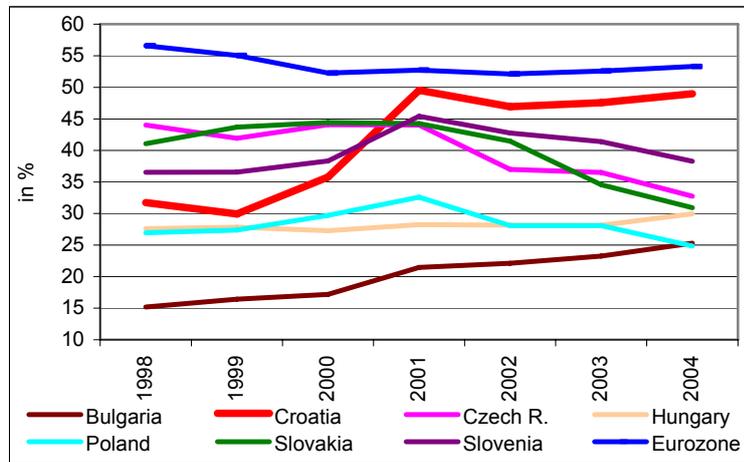
Note: Data for Croatia cover the whole 2005 year.

Sources: Central banks' web sites and CNB.

As Croatia is characterised by the high share of loans in GDP, compared with other similar countries, it also outstrips them by its share of total deposits, i.e. domestic savings, coming closer to the eurozone level. In 2004, the share of total deposits in GDP exceeded 49% in Croatia, with

a clearly observable increase in the share of deposits in 2001, during euro introduction (autumn 2001/spring 2002).

**Figure 21** Changes in the Share of Total Deposits in GDP



Source: IFS.

On the other hand, current expectations related to movements in market parameters affecting bank clients' debtor position suggest that the trend could weaken in the near future, after a long period. Specifically, **with ECB's key interest rates increased twice**, late in 2005 and early in 2006, **the long expected increase in eurozone interest rates has been announced**, and this would result in a prices increase in banks' foreign funds.

**Table 15** Selected Indicators of Banking System Operations (in %, unless otherwise noted)<sup>14</sup>

Indicator	2001	2002	2003	2004	2005
Number of banks	43	46	41	37	34
Assets (in million HRK)	148,455	174,139	204,043	229,305	260,594
Return on average assets (ROAA)	0.9	1.6	1.6	1.7	1.7
Return on average equity (ROAE)	6.6	13.7	14.1	16.1	15.6
Adjusted ROAA	1.5	1.6	1.5	1.7	1.7
Indicator of net operating income	1.6	1.9	1.9	2	1.9
Indicator of net interest income	3.6	3.3	3.4	3	2.9
Indicator of general administrative expenses and depreciation	3	2.7	2.6	2.3	2.2
Share of interest income from loans in average loans	11.3	9.6	8.7	8.1	7.6
Share of interest expense on deposits in average deposits	3.2	2.8	2.5	2.4	2.5
Share of difference between interest income from loans and interest expense on deposits in average assets	2.9	2.7	2.9	2.7	2.7
Share of value adjustment in total loans to financial institutions	5.1	3.1	2.1	0.4	0.2
Share of value adjustment in total household loans	4.1	3.4	3.4	3.3	2.8
Share of value adjustment in total loans to other enterprises	16.1	11.6	9	7.7	6.3
Share of specific provisions in total off-balance sheet risks	2.7	0.8	0.4	0.4	0.2
Ratio of f/c loans granted and f/c deposits received to loans	8.3	11.3	10.2	11.2	15.6
Total f/c assets to total f/c liabilities ratio	51.8	44.5	49.3	50.5	50.7
Long f/c position to regulatory capital ratio	11.3	12.8	13.9	12.1	8.4
Short f/c position to regulatory capital ratio	4.8	2.7	1.4	0.8	1.7
Ratio of overdue claims to specific provisions for loans to other enterprises	121.2	128.7	131.5	128.2	129.4
Ratio of overdue claims to specific provisions for household loans	113.9	116.3	105.6	109.9	102.7
Ratio of overdue claims to specific provisions for loans and deposits	108.4	117.5	117.2	112.1	113.6
Share of deposits and loans from non-residents in total liabilities	15.4	21.8	26.7	28.4	28.1
Capital adequacy ratio	18.5	17.4	16.5	15.3	13.4
Total capital to total assets ratio	9.2	9.5	8.9	8.6	9
Tier 1 capital to risk-weighted assets ratio	16.9	15.2	14.1	13.1	11.8
Share of short-term loans granted in total short-term deposits received and short-term loans granted	32.2	37	35.5	35	34.3
Loan to deposit ratio	58	65.7	65	65.3	69.6
Share of loans from the CNB and domestic banks in total loans and deposits received	7.6	8.7	20.2	14.3	27.3

Source: CNB.

<sup>14</sup> According to unconsolidated preliminary Bank Statistical Reports as at 31 December 2005 and unconsolidated revised Bank Statistical Reports for previous period, excluding banks subject to winding-up proceedings, available on 8 March 2006. All indicators are calculated on the basis of aggregate unconsolidated banking sector data on a net basis (values of asset items are reduced by corresponding specific provisions). For indicators that are calculated on the basis of the average amount of a certain item, averages are calculated as the arithmetic mean of the balance at the beginning and the balance at the end of the period for which the indicator is calculated.

### **4.3 INTRODUCTION OF OPEN MARKET OPERATIONS – REASONS, EFFECTS AND LIQUIDITY MANAGEMENT**

The CNB started to implement the new monetary policy operational framework in April 2005. Compared with the previous few years, the new framework placed considerable emphasis on the management of domestic liquidity and interest rates, in addition to the exchange rate. Due to a high degree of euroization, monetary policy was oriented towards maintaining a stable exchange rate, which necessitated the interventions in the foreign exchange market so that excessive exchange rate fluctuations would not lead to the departure from the CNB's primary objective – price stability. Concurrently, high foreign capital inflows stimulated the central bank to purchase the foreign exchange from banks and thus create the reserve money, while the resultant liquidity surpluses then had to be sterilized with the instrument of required reserves. Given such conditions, the liquidity management was relegated to a position of second importance, while money market interest rates were highly volatile. All this rendered it impossible for the central bank to implement its monetary policy by affecting the interest rates, i.e. the price of money and to use the interest rate channel to influence the developments in the financial market and the economy as a whole, as is the case in highly developed economies.

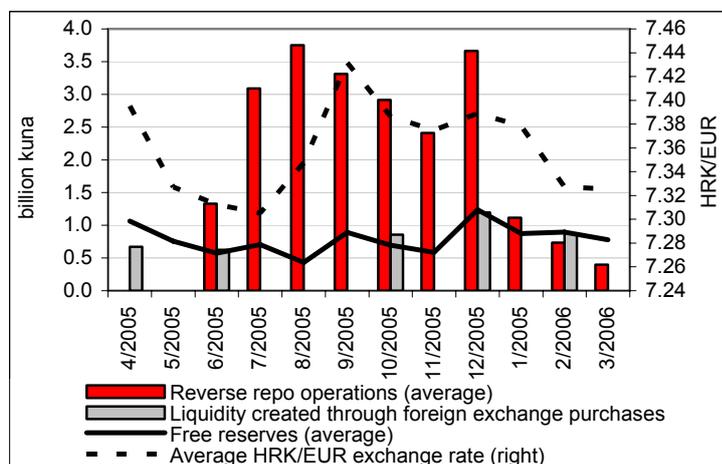
Open market operations were brought into focus by the new operational framework, which had been aligned with that used by the ECB. Two objectives underlying the implementation of open market operations were: a) stabilization of the overnight interest rate and setting of the benchmark interest rate in the money market in the short run, and b) establishment of the transmission mechanism, including the interest rate channel of monetary policy in the long run. Moreover, the new operational framework called for a change in the existing monetary policy instruments and initiated the introduction of new instruments.

Among open market operations, the regular reverse repo auctions have so far been the most frequently used tool for the creation of kuna liquidity. At the regular reverse repo auctions, which are conducted every week (on Wednesdays), the CNB purchases Treasury bills from banks on an interim basis and thus creates the liquidity in the system. Banks are required to redeem the bills in one week's time and to pay interest at the agreed repo rate. The CNB may at its discretion reject the bids it has received and set the marginal repo rate below which it will not accept, i.e. allow the excessive creation of liquidity. In this manner, the central bank directly manages the amount of the required liquidity in the system. Treasury bills are used as collateral in the open market operations, which in turn increases banks' demand for this instrument in the domestic market and contributes to the growth of the short-term debt of the central government.

The introduction of open market operations in April did not generate much interest among banks, due mainly to high liquidity in the system. Banks turned increasingly to this instrument in the summer months of 2005. The period surrounding the tourist season implies a significant increase in the domestic sources of funds and an inflow of foreign exchange into banks. In the past years, the banks usually sold a part of their foreign exchange inflows to the CNB to ensure the needed kuna liquidity. An important feature of these transactions has also been the central bank's intention to moderate the appreciation pressures. However, high demand for kuna in the summer months of 2005 was met exclusively through the reverse repo operations, while there was no need for foreign currency repurchases. As a result, funds created at the reverse repo auctions stood at about HRK 5.0bn, while the demand for kuna funds remained strong until the end of

2005. Out of 39 reverse repo auctions held in 2005, the turnover was recorded at 32 auctions, amounting to an average of HRK 2.8bn.

**Figure 22** Kuna Liquidity Created through Reverse Repo Operations and Foreign Exchange Purchases from Banks

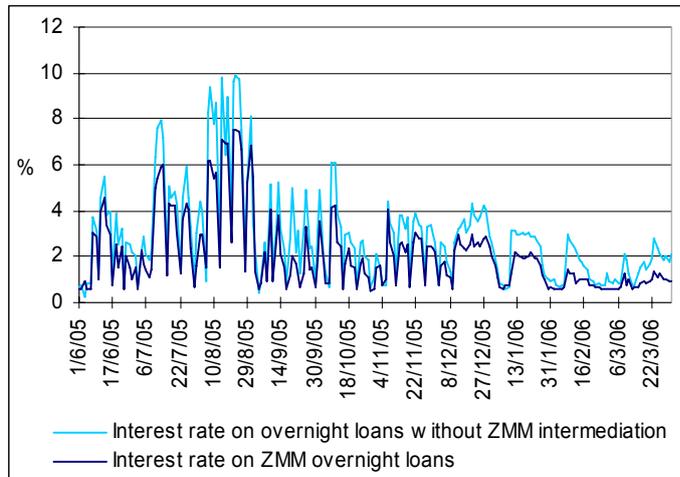


Source: CNB.

Late 2005 and early 2006 were marked by very high liquidity of the banking system, generated by high demand for kuna needed by banks for the financing of the central government and the continuation of lending to other sectors. Appreciation pressures on the exchange rate prompted the central bank to intervene in the foreign exchange market and thus create the kuna liquidity, while the reduction in the general reserve requirement rate from 18% to 17% liberated additional funds to banks. In early 2006, the CNB, for the first time since the beginning of more extensive use of repo auctions in mid-2005, decided to turn down up to 50% of the values of banks' bids received at the regular repo auctions. The period of abundant kuna liquidity continued into March, coupled by a significantly lower demand of banks at the auctions and the turnover standing at an average of HRK 0.6bn. Thus, after the extensive use in the second half of 2005, the use of the reverse repo operations was reduced in the first quarter of 2006, with their future dynamics to be determined by liquidity shortages in the system.

As far as the influence of open market operations on the reduction of interest rates volatility in the money market is concerned, it can be said that the reverse repo operations of the CNB, together with more attractive and flexible management of kuna liquidity in the system, have helped stabilize the overnight interest rate, especially in late 2005 and early 2006 (Figure 23). Open market operations have so far not resulted in the setting of the benchmark interest rate in the money market, which means that the monetary policy is still not transmitted through the interest rate channel.

**Figure 23** Average Interest Rate on the ZMM, daily data, on annual basis



Source: CNB.

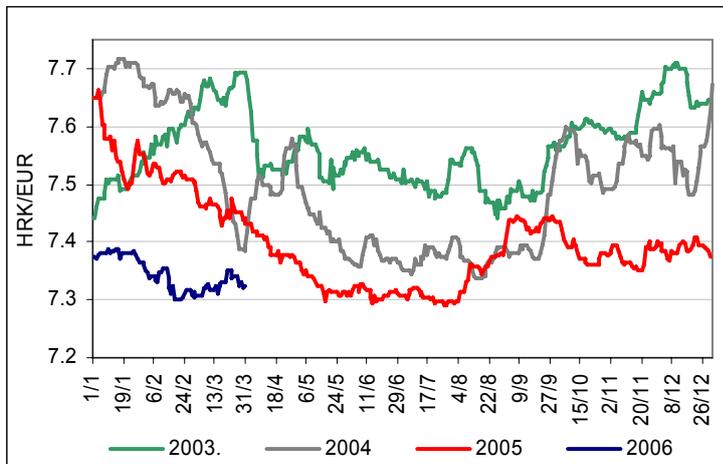
Finally, it should be pointed out that the new monetary policy operational framework does not imply the departure from the CNB's policy of maintaining a stable exchange rate of the domestic currency by preventing its short-term volatility. Moreover, it complements the policy of exchange rate management by more active management of liquidity in the monetary system. Hence, the CNB will take action in the foreign exchange market when deemed necessary in order to prevent sudden fluctuations in the exchange rate of the kuna against the euro, which is in line with the policy it has exercised over the last ten years. Thus, the foreign exchange interventions will remain the main monetary policy instrument, whereas room for the use of other instruments will largely depend on capital inflows and pressures on the exchange rate.

#### **4.4 IMPACT OF BANK FOREIGN BORROWING ON THE EXCHANGE RATE DEVELOPMENTS**

The exchange rate followed the usual seasonality pattern in past years. However, in the last two years, and especially in late 2005 and early 2006, the strong appreciation pressures, driven, among other things, by foreign exchange inflows from bank foreign borrowing contributed to the change of the usual exchange rate pattern.

In 2005, the appreciation of the kuna/euro exchange rate was marked by several important factors: increased supply of foreign exchange generated by bank foreign borrowings directed towards financing of domestic lending activities, increased demand for kuna stimulated by the issue of government bonds on the domestic market, appreciation expectations of market participant generated by the start of EU accession negotiations, increased investors' appetite for the placement of funds in domestic securities, and solid inflows of foreign exchange from exports of goods and services and worker's remittances. However, this said, it seems that the key contributor to the change in the exchange rate seasonality was the increase in bank foreign borrowings at end-2005.

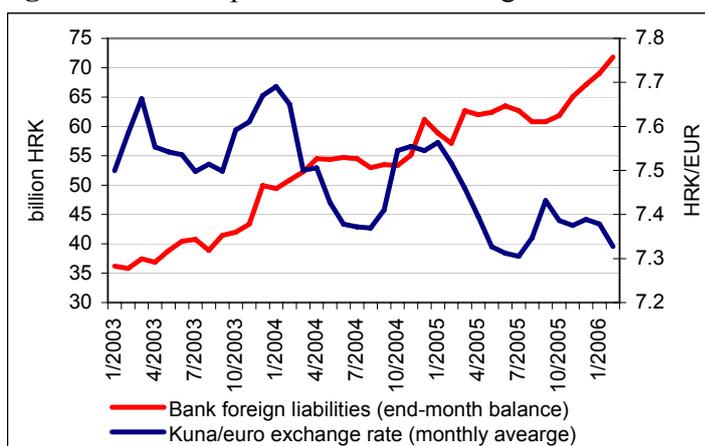
**Figure 24** Daily Kuna/Euro Exchange Rate, year-on-year changes



Source: CNB.

The exchange rate movements were stable in early 2006, accompanied by enduring appreciation pressures. The continuation of the strong upward trend in bank foreign liabilities resulted in an additional supply of foreign exchange in the domestic foreign exchange market. The purchase of foreign exchange from banks was registered again in February, with the effect of a further improvement in the already good kuna liquidity position. Such a high level of kuna liquidity enabled the banks to continue lending to the non-banking sector at an accelerated pace, as well as to remain the major source of finance for the central government in the domestic market. High kuna liquidity, which has been reflected in the strong growth of reserve money, underlines the phenomenon of the present appreciation pressures.

**Figure 25** Developments in the Exchange Rate and Bank Foreign Liabilities



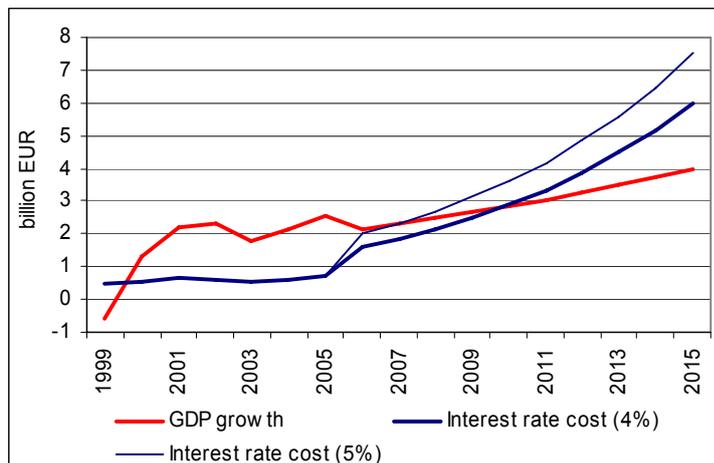
Source: CNB.

#### 4.5 WHAT TO EXPECT IF THE EXTERNAL DEBT GROWTH DYNAMICS FAILS TO STABILIZE?

Given the past track record of external debt and GDP growth dynamics, the question arises as to when the burden of interest payments might exceed the growth of nominal GDP. Should this happen, the external debt indicators would definitely assume an unsustainable path, which might lead to a debt crisis.

Simplified calculations have shown the following: under scenario 1, which implies the average performance results<sup>15</sup> and the interest rate of 4%, the cost of interest payments might exceed the annual growth of GDP already in 2010 (turning year). The expected rise in foreign interest rates further deteriorates this ratio. Therefore, under scenario 2, which implies the average interest rate on the external debt of 5%, the cost of interest payments would exceed the growth of GDP as soon as in 2007.

**Figure 26** GDP Growth and Interest Rate Costs on External Debt (scenario 1 and scenario 2)

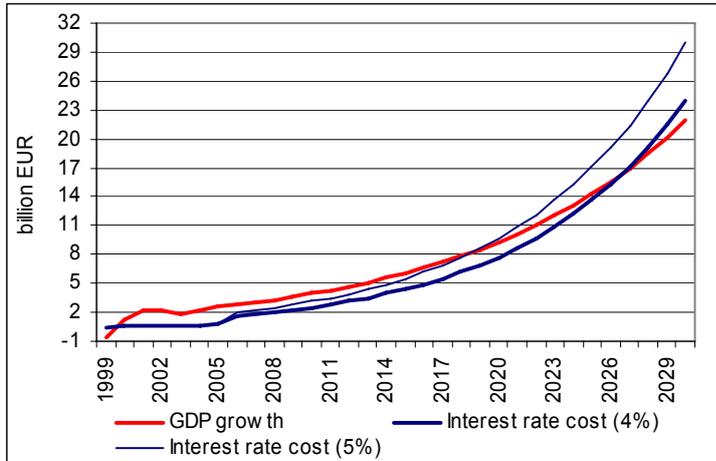


Source: CNB.

Assuming no changes in the growth dynamics of GDP and external debt in relation to 2005, when Croatia's GDP in euro terms grew by as much as 9% and the external debt by 12%, the situation is somewhat more favourable. Specifically, the cost of interest payments would exceed the growth of GDP as late as in 2027. With the interest rate at a somewhat higher level (5%), this would happen in 2019.

<sup>15</sup> External debt of the Republic of Croatia grew at an average annual rate of 15.7% in the period 1995-2005, while the growth rate of nominal GDP was 7.0%. Both indicators were derived from their respective euro values.

**Figure 27** GDP Growth and Interest Rate Costs on External Debt (scenario 5 and scenario 6)



Source: CNB.

Table 16 provides a summary of 6 selected possible scenarios and the resultant turning years, derived from various assumptions on the growth in nominal GDP, external debt and interest rate.

**Table 16** Assumptions Review and Resultant Turning Years

Scenario	External debt growth	GDP growth	Interest rate	Turning year
1	15.7%	7.0%	4.0%	2010
2	15.7%	7.0%	5.0%	2007
3	12.0%	7.0%	4.0%	2013
4	12.0%	7.0%	5.0%	2008
5	12.0%	9.0%	4.0%	2027
6	12.0%	9.0%	5.0%	2019

Source: CNB.

## 5 CONCLUSION

The last few years have seen a very strong growth in bank placements, coupled by a sharp increase in both personal consumption and investments. The increase in domestic demand has provided for high GDP growth, deteriorating balance of payments ratios. The bank placement growth has primarily been made possible and driven by the funds of foreign owners of domestic banks and by other foreign investments, attracted by an opportunity to achieve much higher rates of return in the Croatian market (increase in domestic banks' sources was half that high). This has been a reason for the rapid increase in external debt, whose accelerated growth rate has undoubtedly become one of Croatia's major economic problems. In the period from 1999 to 2005, the external debt of the overall economy rose at an average annual rate of 16%. With the officially measured nominal GDP increasing at a considerably slower average annual rate of 7% in the same period, Croatia has turned, based on the external debt to GDP ratio, from a moderately indebted to a highly indebted country.

As shown by a detailed analysis of external debt indicators, external debt has still remained within sustainable limits, but the continuation of recent trends could very soon cause a debt crisis. Despite the very high external debt to GDP ratio, Croatia's debt assessment improves when taking into account strong levels of international reserves and banks' operational foreign currency reserves, when considering the external debt servicing burden in relation to the country's ability to earn foreign exchange through goods and services exports or when analysing the external debt structure, which indicates that only a small portion of debt comprises explicit direct or contingent government liabilities. However, if recent trends continue, they are certain to lead to a debt crisis and a reduction in the standards of living. Should these trends continue, the burden of interest payments could soon exceed GDP growth.

In addition to carrying these potential risks, the rapid increase in external debt has also directly impaired the efficiency of monetary policy. The room for manoeuvre of monetary and exchange rate policies has been substantially reduced owing to constant appreciation pressures on the domestic currency, generated by the strong inflow of foreign capital, seeking higher rates of return in the domestic market. Monetary policy has been faced with heightened inflation risks, involved by very high liquidity levels, which the CNB has had to maintain in order to prevent appreciation, while at the same time being prevented from expediting the reform of monetary policy instruments, and especially from reducing the very high reserve requirement rate. Instead of gradually reducing the reserve requirement rate and bringing it to one-digit levels before EU accession, the CNB has had no other option but to introduce yet other forms of reserve requirements in an effort to discourage the investment of foreign sources of funds into domestic credit growth.

In addition to the mentioned appreciation pressures, there are other limitations as well: in a heavily euroized economy such as Croatia's, the exchange rate depreciation could not be used as an instrument to improve balance of payments conditions. The available published empirical research on the exchange rate impact on balance of payments developments suggests that the price elasticity of Croatia's foreign trade is very small and that it would take a long period of time for the devaluation of the kuna to produce positive effects. Additionally, this research has not covered the effects on assets produced by depreciation. Direct negative effects on assets produced by depreciation would several times exceed its direct positive effects and lead to a deterioration

of all debt indicators. Consequently, depreciation would increase the share of defaulted liabilities. It is very difficult to empirically estimate the increase in the shares of defaulted external debts and of defaulted domestic foreign currency indexed and other kuna debts. In any case, the higher the depreciation, the sharper the increase in the share of defaulted debts.

In the period until 2001, Croatia's external borrowing was dominated by the build-up of public sector external debt. Since 2002, however, the overriding trend has been the accelerating borrowing by the private sector (especially banks), which has been obtaining the required foreign savings from private foreign sources. In response to the measures aimed at curbing their foreign borrowing, implemented by the central bank since early 2003, banks have transferred a part of their operations to the areas outside the CNB's authority, i.e. to their affiliated enterprises, with a considerable increase recorded in these enterprises' external debt too.

While bringing manifold benefits to both the customers and the country, the sale of banks to leading regional banks has also created economic problems. Having entered the Croatian market, foreign banks were able to do two things: boost their operations to a level unattainable in the far more competitive Western markets, and increase profitability, due to interest rates being higher in Croatia than abroad. The main benefits for Croatia have been related to the lowered barriers between foreign markets and the domestic financial market, a facilitated import of foreign capital and a continuing downward trend in interest rates, started as early as in 1997 during bank rehabilitation. The banking sector itself has seen a series of improvements associated with the organisation of business operations and overall cost reduction. However, the sale of Croatian banks to foreign banks was also followed by a sharp increase in bank lending and substantial demand growth. In the period from end 2000 to end 2005, bank placements to households rose at an average annual rate of 26.6%. Household lending has thus become commercial banks' main business activity.

Such bank behaviour is a product of their efforts towards short-term profit maximisation. So far, banks have been able to collect most of the loans granted. They have also taken into account contingent risks, i.e. the problems that may arise in the event that market circumstances change, and they have substantial own capital. Most of the loans granted, especially household loans, are secured by quality collateral. Although very small compared with their parent banks, accounting for less than one percent of their parent banks' consolidated assets, Croatian banks annually generate a return on invested capital of more than 15%, which is regarded as an extremely good figure. However, the true fact is that small exposure and high profit create room for risky investments and risky bank operations.

It is necessary to halt current trends in external debt, as their continuation could lead to a debt crisis, while also impairing the efficiency of monetary and exchange rate policies. The Government of the Republic of Croatia and the CNB can put in place some measures to that end. What they cannot do is impose capital controls, with Croatia's accession to the Economic and Monetary Union implying their phased in and complete abolition. The Government is directly capable of and responsible for bringing its expenditures in line with current revenues, i.e. it has to reduce the budget deficit. The budget deficit reduction and fiscal consolidation through fiscal policy measures have not been implemented quickly enough in Croatia. The Government can indirectly influence household consumption with a whole series of other measures within its competence, e.g. by increasing excises on some products or by proposing laws providing

disincentives to further borrowing growth. Finally, also falling within the Government competence are reforms capable of stimulating GDP growth. However, it should be stressed that the problem of external debt cannot be resolved relying exclusively on structural reforms. Specifically, Croatia' average real GDP growth rate, standing at 4.6%, is double the average growth rate of EU member countries (amounting to about 2%), while South-East European countries, as well as the advanced countries that have recently joined the EU, have growth rates similar to that of Croatia.

The CNB has already implemented a number of measures aimed at discouraging banks' foreign borrowing. What central banks most often do when faced with an unsustainable growth in external debt is raise interest rates. However, such a measure would prove ineffective in Croatia, and its implementation would only increase foreign capital inflows and build up appreciation pressures. For this reason, the CNB has mostly focused on other measures to limit foreign borrowing, those aimed at increasing banks' operating expenses, thus reducing the initial spread between (higher) domestic and (lower) foreign interest rates, the main incentive for foreign owned banks to have arrived in this area. The key measure is the marginal reserve requirement, introduced in July 2004, which requires banks to deposit part of their new foreign borrowing into an interest free account with the CNB. The gradually increased marginal reserve requirement rate has stood at 55% since January 2006. This means that banks have had to deposit 55% of their new foreign borrowing interest free with the CNB, while being allowed to place the remaining funds with their clients. In addition, the CNB has also increased the minimum requirements that banks have to meet while managing foreign currency related credit risks. As of the first quarter 2006, banks have been required to monitor their clients' exposure to foreign currency risks. In addition, with the modifications introduced to the capital adequacy calculation method, the capital adequacy of larger banks is likely to decrease and approach the legally prescribed minimum. The capital adequacy risk weight on all foreign currency loans and foreign currency indexed loans, granted to borrowers unhedged against losses arising from changes in the exchange rate, has been increased by 25 percentage points. The capital adequacy is expected to drop as banks will probably treat household loans differently from loans granted to borrowers hedged against foreign currency risk.

There have been some indications that the recent changes introduced to the marginal reserve requirement rate and calculation method could start yielding results, as their effect can be observed in commercial banks having to considerably raise interest rates in order to achieve positive returns on the funds acquired from abroad. Since early this year, lending interest rates have ceased to decline, whereas deposit rates have drifted higher. Loan granting requirements have not been eased any further. These trends can be seen as providing an indication of a slowdown in credit expansion further in the year, with a resultant slowdown in foreign borrowing.

The central bank has also implemented measures underpinning Government's efforts to finance the general government deficit without recourse to new foreign borrowing. In February 2005, the minimum required foreign exchange liquidity ratio was lowered from 35% to 32% to provide for the refinancing of matured government eurobonds through the Ministry of Finance's long-term borrowing from domestic banks. Introduced in 2005 as a new monetary policy instrument, open market operations have so far been conducted solely via reverse repo operations involving Ministry of Finance's Treasury bills. The economic purpose of these operations is to sustain bank liquidity and short-term lending to banks based on pledged Treasury bills. This monetary

instrument has facilitated the Ministry of Finance's borrowing in the domestic market and spurred banks' demand for its Treasury bills. The CNB continued implementing similar measures in 2006. Recently introduced amendments to the regulations on the minimum bank liquidity requirements have provided for the short-term refinancing of government eurobonds that fell due in 2006. The general reserve requirement rate was reduced from 18% to 17% in January 2006, with strong liquidity generated to back Ministry of Finance kuna bond issues in December 2005 and February 2006.

CNB measures have not been aimed to stop foreign borrowing and bank lending, but to slow them down, reducing them to the levels considered conducive to continued economic growth, attainable without further worsening of balance of payments conditions and further foreign borrowing. In the Monetary Policy Projection for 2006, a document providing the analytical background for recently adopted CNB measures, the growth of corporate bank placements is projected to range between 12% to 13%, the current account deficit to stand at about 6% of GDP, provided that external debt remains stagnant, while the real annual economic growth rate is to stand between 4% and 4.5%. In our opinion, without these recently implemented measures, the trends from 2005 would continue: bank placements would grow at an approximate annual rate of 20%, balance of payments conditions would deteriorate and external debt would continue to grow.

It should be stressed that central bank measures have been only halfway successful, as could have been expected given the lack of comprehensive support from other economic policy makers. As the measures in effect will have to be gradually harmonised with the regulations comprised by the common EU monetary policy, it can be concluded that fiscal policy makers, assisted and supported by the central bank, have to, as soon as possible, take on a more active and direct role in order to resolve the problem of Croatia's external imbalances and vulnerability in due time and with no serious consequences.

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