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MACRO PRUDENTIAL *analysis*

CROATIAN NATIONAL BANK

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MACROPRUDENTIAL ANALYSIS

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Contents

1 Introduction[1]

The Croatian banking sector remained very stable in the first six months of 2006, among other things due to a favourable macroeconomic environment. Real economic growth accelerated to 4.9% year-on-year at the end of the first half of 2006. In contrast with 2005, the main growth generator in 2006 was no longer personal consumption but gross fixed capital formation, especially in the first quarter of the year. Personal consumption continued to grow sharply, although at a somewhat subdued pace relative to 2005. As wage growth was relatively slower, personal consumption was mainly driven by rapid consumer loan growth. Inflation rate remained slightly increased, with the year-on-year rate of change in the CPI ranging between 3.0% (in March) and 4.0% (in May and June 2006). Although exceeding the average annual inflation rate in the eurozone, Croatia's inflation rate continues to give no cause for concern, in particular in view of data suggesting an easing of inflationary pressures in the second half of 2006. The economic upturn in the first half of 2006 led to a considerable improvement in government finance indicators. The annual consolidated central government deficit (on a cash basis, exclusive of capital revenues) amounted to 1.9% of GDP in the first half of 2006, 2.4 percentage points less than in the first half of 2005. In addition, after several years of increase, the general government debt to GDP ratio, excluding government guarantees, dropped at the end of June 2006 relative to the end of 2005. The accelerated economic growth also had a positive influence on the labour market, as evident in the unemployment rate decrease coupled with the increase in registered employment in the first half of 2006 compared with the same period in the previous year.

In contrast, external imbalance indicators deteriorated further in the first half of 2006. Despite central bank efforts to curb external borrowing, external debt rose by 7.60% and its ratio to GDP by 2.1 percentage points at the end of June 2006 from the end of 2005. However, while the high external debt to GDP ratio ranks Croatia among highly indebted countries, strong tourism revenues have kept the external debt to goods and services exports ratio considerably below the level that might indicate potential external liquidity problems. As opposed to 2005, when the main portion of the external debt increase was generated by other sectors (primarily non-financial corporations), the major driver of external debt growth in the first six months of 2006 was banks' external borrowing. At the same time, a sharp accelera-

1 Definitions and guidelines for macroprudential analysis which provide a basis for this analysis are presented in the IMF's Financial Soundness Indicators – Background Paper, dated May 2003. Currently in progress is a long-term statistical project involving the harmonisation of the methodological framework for this analysis with the most recent recommendation from the IMF's Compilation Guide on Financial Soundness Indicators of August 2004. The analysed indicators for June 2006 were calculated in accordance with the data available as per 30 September 2006. Gross domestic product and all other flow indicators as per 30 June 2006 were calculated as the sum of results in the last two quarters of 2005 and the first two quarters of 2006. All other indicators were calculated based on the balance as at 30 June 2006. The described methodology produces less volatile, that is, less seasonally sensitive indicators, but also results in slight discrepancies between their values and the values of similar indicators in other CNB publications.

tion of domestic banks' corporate placements led to a slowdown in external debt of other domestic sectors. The ratio of government debt to total external debt decreased further, due to continued government financing on the domestic capital market. However, this indirectly increased external liabilities of other domestic sectors, primarily banks, which partly financed these investments from foreign sources.

Following a temporary slowdown in 2005, bank lending surged again in the first six months of 2006. Bank corporate and household loans rose to 65.5% of GDP from 61.4% of GDP at the end of 2005. While household loans continued to account for the largest share of the loan increase, corporate loans grew at a much stronger pace in the first half of 2006, with the result that the annual growth rates of household and corporate loans stood at 23.9% and 24.5% respectively at the end of June.

The non-financial corporation sector increased its relative debt burden by 22.8% over the last year, while the estimated value of its total debt reached 55.8% of GDP at the end of June 2006. The largest portion of total debt was as usual accounted for by debt to banks, rising further over the first half of 2006. Due to increased bank financing, the external component of non-financial corporation debt was slightly reduced. Bank lending to non-financial corporations also increased in the eurozone, with loans to non-financial corporations rising at an annual rate of 11.4% at the end of the first half of 2006, which was half of Croatia's rate of 24.5%. However, the share of these loans in GDP was at 31.34% considerably lower in Croatia than in the eurozone (45.35%) at the end of the first half of 2006. Currency risk, or the risk of the kuna weakening, and interest rate risk, generated by an expected increase in global long-term interest rates, have remained the major risks for non-financial corporations in Croatia. However, interest rate risk exposure of non-financial corporations declined slightly in the first half of 2006, in consequence of banks' long-term corporate loans whose interest rates may vary within a year reducing their share from 85.7% to 83.6% of total long-term loans in that period.

Total household sector debt also continued rising in the first half of 2006. The estimated household debt to GDP ratio reached 38.0% at the end of June 2006, rising at an annual rate of 24.1%. Debt to banks, accounting for 96% of total household debt for quite some time, was once again the leading household debt category. Croatia's household debt to banks still considerably exceeds that in other EU candidate countries and new EU member countries, whose share of bank claims on households in GDP stood below 19% at the end of June 2006. However, while having a higher household loans to GDP ratio, Croatia also has a higher ratio of household deposits to GDP than comparable CEE countries. Specifically, in Croatia this ratio amounted 43.3% of GDP at the end of June 2006, while it ranged between 20% and 30% of GDP in most of the observed countries. Despite the household debt increase, aggregate debt burden indicators have given no cause for concern as, due to interest rate fall and extended loan repayment terms, debt burden remained mostly unchanged over several years.

The rise in non-financial private sector debt has so far failed to increase the credit risk indicator in banks' portfolios. Quite to the contrary, the share of impairment loss and specific provisions for identified losses in related placements and contingent liabilities dropped from 2.6% to 2.0% from the end of June 2005 to the end of June 2006. However, what should also be taken into account is the relative level of overdue claims, whose share in total bank assets expanded to 24.7% over the first half of 2006, mainly due to overdue claims on the government. In addition, a factor to be taken into account in assessing credit risk is that the quality of placements decreases in inverse proportion with their maturity, so that it is possible that the credit boom of the last few years will not produce any negative effects on banks' balance sheets until some time in the future. On the other hand, more aggressive bank strategies in the first half of 2006 led to a considerable improvement in relative profitability ratios for that period compared with 2005. Specifically, the annual ROAA for Croatian banks was 1.76% at the end of the first half of 2006, compared with 1.65% at the end of 2005, whereas the ROAE stood at 15.7%, relative to 15.1% at the end of 2005.

The institutional framework of the Croatian financial market underwent further changes in the first six months of 2006, primarily in the context of the harmonisation of the Croatian financial legislation with the EU acquis. The most important change was undoubtedly the commencement of operation of the Croatian Financial Services Supervisory Agency (HANFA), which assumed the respective competences of the former Croatian Securities Commission, Agency for Supervision of Pension Funds and Insurance and Directorate for the Supervision of Insurance Companies. Drafting is underway on several acts regulating financial market operations, including a securitisation act, whose draft should be completed by the end of 2006 in order to be submitted to parliamentary procedure in the first quarter of 2007. The Croatian National Bank has been drafting a comprehensive credit institution act, which is to be brought in line with EU guidelines. According to the latest information, the Croatian Registry of Credit Obligations (HROK) went through an extensive test procedure in the second half of 2006 and is expected to become fully operational in 2007. Despite announcements, a leasing act has not been passed yet, but it is in parliamentary procedure. The land registry and cadastral reform has proceeded as planned. In this connection, the Ministry of Justice and the State Geodetic Directorate, as project leaders, have been running a campaign aimed at raising public awareness of the importance of checking land registry data. This can now be done through the Internet, as 80% of data has been digitised.

2 Macroeconomic Developments

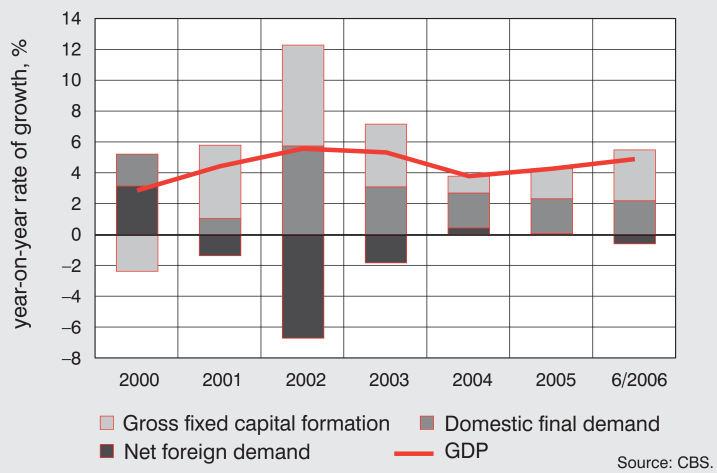
The main aggregate economic and financial indicators continued to improve in the first half of 2006. The Croatian economy accelerated further, unemployment decreased and inflation, while continuing to rise, remained moderate. However, total external debt went on increasing notwithstanding CNB's monetary policy measures, continued government borrowing in the domestic market and a drop in general government external debt. This main reason for this is to be found in banks' continued excessive external borrowing, but also in enterprises' increased reliance on foreign financing sources. In the same period, the current account deficit widened, indicating a further worsening of the external imbalance. Still, the domestic currency failed to weaken due to these developments. On the contrary, the kuna was under constant appreciation pressures in the first half of 2006, to which the central bank repeatedly responded by euro purchases on the domestic market. The appreciation of the kuna was also largely due to the said external borrowing of banks and enterprises. Despite the continued worsening of the external imbalance, domestic and international institutions held positive expectations regarding Croatia's economic growth, estimating the 2006 GDP growth rate in the range of 4.0% to 4.7%. Positive analysts' expectations also stemmed from Croatia's EU accession negotiations, which proceeded as planned in the first six months of 2006.

Real economic growth stood at a high 4.9% year-on-year until the end of the second quarter of 2006, mainly due to the sharp growth rate in the first quarter. The weaker performance in the second quarter could be attributed to base effects, as other indicators suggest continued accelerated GDP growth. The economic growth was mainly driven by gross fixed capital formation, especially in the first quarter 2006, with the greatest contribution coming from private investments, above all construction investments, while government capital expenditures played a lesser role due to the completion of the road construction investment cycle. Personal consumption dipped compared with 2005, with its trends, given a somewhat slower wage growth, being mainly influenced by a consumer loan increase. In contrast with 2004 and 2005, when net foreign demand made a positive contribution to growth, its contribution in the first half of 2006 was negative, owing to import growth exceeding export growth, despite relatively high export growth rates. Data collected thus far indicate continued strong economic growth in the second quarter of 2006, as well an increase in personal consumption due to a rise in the wage bill and transfers to households, including pensioners' debt repayments. In addition, expectations are that exports will increase further, as well as investments and government expenditures.

Despite the strong economic growth, Croatia's external imbalance deteriorated further in the first half of 2006, primarily because of a negative foreign trade balance. The annual balance of payments current account deficit rose to 7.9% of GDP at the end of the second quarter of 2006, 1 percentage point more than at the end of the same period in 2005, which was due to goods import growth exceeding the growth of goods exports. Expectations are, however, that rising tourism revenues in the third quarter are to result in a decrease in the current account deficit at the end of 2006.

In contrast, as a result of the strong economic upturn, coupled with a sharp increase in fiscal revenues, government finance indicators improved considerably in the first half of 2006, which led to a government budget revision in July, involving an increase in both revenue and expenditure items. The annual consolidated central government

Figure 1 Economic Growth

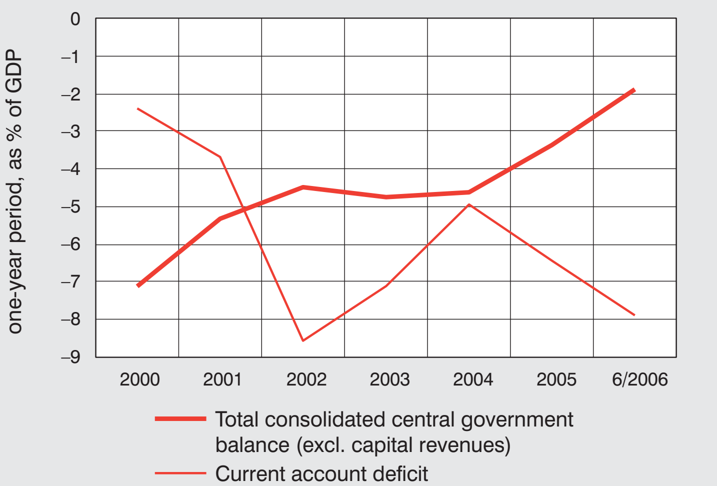


Source: CBS.

deficit, on a cash basis, fell to 1.9% of GDP at the end of the first half of 2006, narrowing by 1.5 percentage points from the end of 2005. While data on the annual consolidated general government deficit, on a modified accrual basis, are yet unavailable for the end of the first half of the year, due to the positive developments the deficit target for 2006 was revised downwards from 3.3% to 3.0% of GDP. However, this excludes pensioners' debt payments (the first instalment was paid off in June) which will, in all probability, produce a considerable macroeconomic effect. Fiscal consolidation is to continue in the second half of the year, focusing on health reform, subsidies' cuts and public administration reform.

Inflation continued its upward trend from the previous two years in the first half of 2006, with the year-on-year rate of change of the CPI ranging between 3.0% and

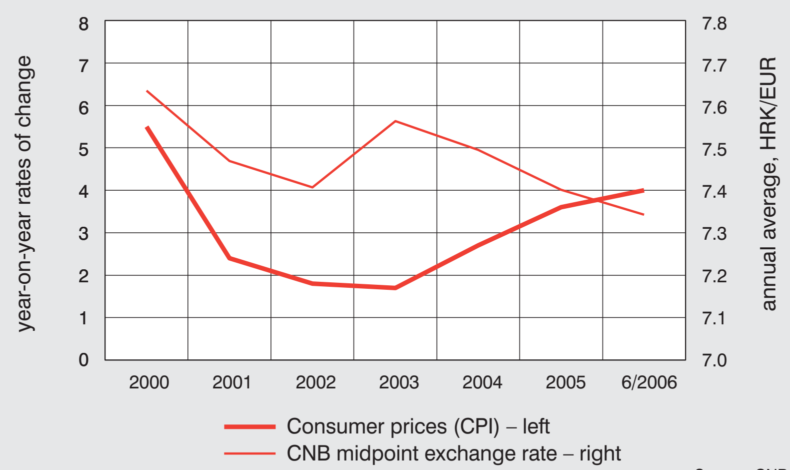
Figure 2 Government Finance and External Balance



Sources: CNB and MoF.

4.0% in June, a record high in the last six years. Although exceeding the average eurozone inflation rate, ranging from 2.2% to 2.5% in the first six months of 2006, this year's inflation rate in Croatia should still not give rise to concern, in particular in view of the available data signalling an alleviation of inflationary pressures in the second part of 2006. In addition to the impact of rising world market crude oil prices on both import and domestic prices, consumer prices were in the first half of 2006 also affected by unfavourable trends in foodstuffs and agricultural products' prices, a growth of administrative prices, e.g. water and utility service prices, and a rise in beverage prices caused by a newly introduced packaging disposal system. Further inflation growth was prevented due to additional nominal strengthening of the domestic currency against the euro and moderate wage growth. In the same period, core inflation, which excludes administrative prices and seasonally volatile agricultural product prices, dropped from 3.0% at the end of 2005 to 2.7% in June 2006, primarily because of a sharp decrease in the growth rate of meat and meat products' prices.

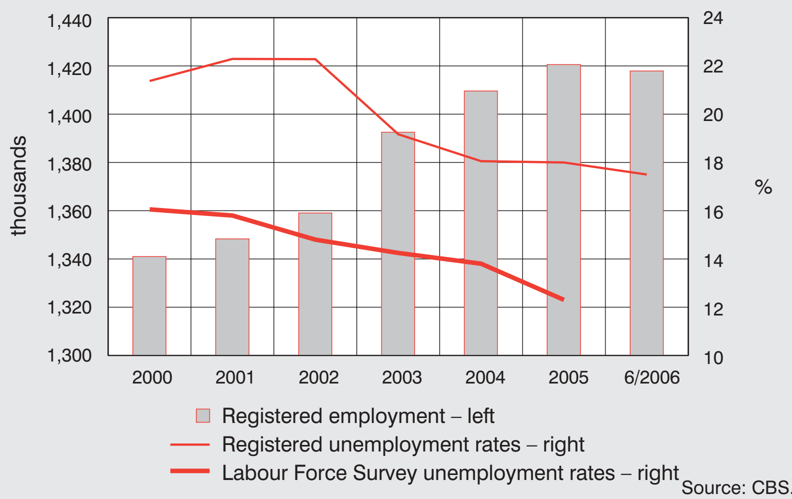
Figure 3 Prices and the Exchange Rate



Source: CNB.

The said nominal strengthening of the kuna exchange rate against the euro was caused by the absence of common depreciation pressures in late 2005 and constant appreciation pressures in the first half of 2006, additionally spurred by the developments in the domestic capital market related to the start of the Pliva d.d. takeover. The average annual kuna/euro exchange rate appreciated from HRK 7.40/EUR in 2005 to HRK 7.31/EUR in the first half of 2006. Despite its lying outside the band of HRK 7.4/EUR to HRK 7.6/EUR in the first six months of 2006, within which it moved in the last seven years, the kuna exchange rate may still be considered as stable. In addition to banks' external borrowing and government borrowing in the domestic market, these exchange rate trends were also influenced by more frequent issues of kuna securities by domestic enterprises and extensive recapitalisation of several banks. As forecast by domestic and international institutions, the average annual kuna/euro exchange rate is to range between HRK 7.30/EUR and HRK 7.34/EUR until the end of the year.

Figure 4 Employment and Unemployment Rates, annual average



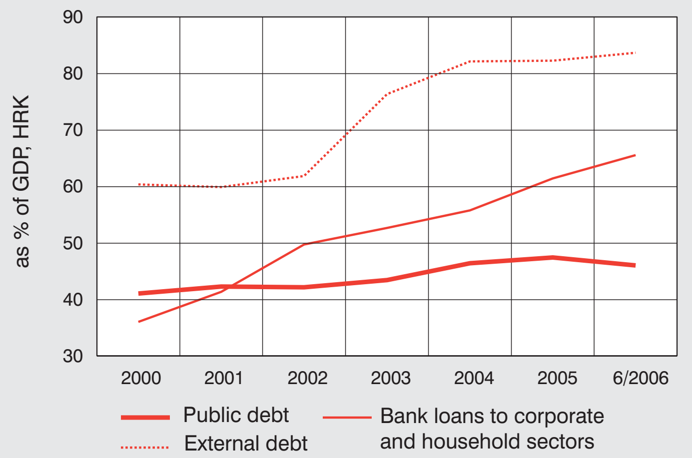
Source: CBS.

The strong economic growth began producing positive effects on labour market trends, with the average registered unemployment rate decreasing from 18.6% in the first half of 2005 to 17.5% in the first six months of 2006, a record low since 1997. Registered employment also rose in the first six months of 2006 compared with the same period last year, while positive developments in the labour market were confirmed by the Labour Force Survey rate, standing at 11.8% in the first half of 2006, a decrease of 1.3 percentage points from the same period in the previous year.

Despite central bank efforts to curb the growth of bank placements, bank lending remained strong, owing to high loan demand and bank competition for market shares. While having an important role in an economic growth driven by consumption and private investments, bank lending also increases appreciation pressures on the domestic currency due to intensified bank external borrowing, and stimulates import growth, which negatively affects the balance of payments. Banks' corporate and household loans rose to 65.5% of GDP by the end of the first half of 2006, compared with 61.4% of GDP at the end of 2005. However, a positive factor is that growth rates of household loans, still accounting for the largest share in the bank loan increase, almost equalled those of corporate loans. Specifically, household and corporate loans grew at a rate of 23.9% and 24.5% respectively at the end of June 2006, in contrast with 20.3% and 16.3% respectively at the end of December 2005.

Total kuna and foreign currency deposits rose at a mere 4.4% in the first half of 2006, despite total kuna deposits growing by a high 37.1% due to the sharp increase in foreign currency indexed kuna deposits. The relatively weak growth of domestic sources of funds was insufficient to compensate for buoyant bank lending, with the result that banks' external liabilities increased by 12.6% in the first six months of 2006 over the end of 2005. The CNB continued implementing monetary policy measures aimed at halting external debt growth in the first half of 2006, but their real effects are yet to be seen. However, curbing the growth of enterprise external borrowing falls outside the direct competence of the CNB, which is why achieving a tangible reduction in external debt calls for a coordinated action of all economic policy-makers.

Figure 5 Main Financial Indicators, end of period



Source: CNB.

3 International Environment

In the first half of 2006, the world economy continued strong growth from the previous year, which was not even undermined by a record high increase in energy products and raw materials prices. The US had the highest growth among industrial countries, especially in the first quarter, while the recovered economies of EU member states and Japan continued to expand. In the same period, growing inflationary pressures prompted these countries' central banks to raise key interest rates and central banks in many other countries to start with monetary policy tightening. Growing at an average rate of above 5%, considerably exceeding the growth rate of EMU countries, CEE economies were driven by strong domestic demand, foreign direct investment and buoyant bank lending. Nevertheless, the sharp global economic upturn was in 2006 primarily driven by emerging markets and developing countries, continually recording above average growth rates. China's current and expected annual growth rates, for example, remained at about 10%, while the growth rate of India and the Russian Federation exceeded 8% and 6% respectively. The strong economic growth in China favourable affected the economies of other countries in the region, whose demand pushed up raw materials prices. The IMF estimates the real world economic growth at 5.1% for 2006 and at a lower 4.9% for 2007.

Table 1 Real Economic Growth in Selected Countries, in %

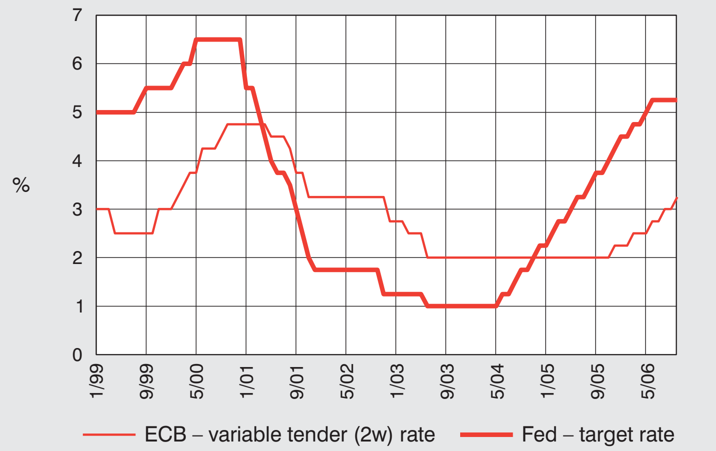
	2003	2004	2005	2006[a]	2007[a]
China	10.0	10.1	10.2	10.0	10.0
Russian Federation	7.3	7.2	6.4	6.5	6.5
Central and Eastern Europe	4.7	6.5	5.4	5.3	5.0
USA	2.5	3.9	3.2	3.4	2.9
Japan	1.8	2.3	2.6	2.7	2.1
EU	1.4	2.4	1.8	2.8	2.4
EMU	0.8	2.1	1.3	2.4	2.0

[a] Forecast. Source: IMF, World Economic Outlook Database, September 2006.

In accordance with rising indicators of economic recovery, EMU countries recorded relatively high growth rates in the first half of 2006. The annual growth rate in the first and second quarter stood at 2.2% and 2.7% respectively, the latter being the highest rate since 2001. In response to mounting inflationary pressures, mostly generated by the price increase in energy products, the ECB continued monetary tightening started in late 2005, when the key interest rate was raised to 2.25%. In 2006, it was first increased by 25 basis points in March and subsequently by the same amount in June, August and October respectively, to finally reach 3.25% at the end of October. Global analysts forecast another 25 basis point increase by the end of 2006. The EMU year-on-year inflation rate ranged between 2.2% and 2.5% in the first half of 2006, exceeding the targeted 2.0%, and it is estimated to remain above the target in the remaining part of 2006, unless oil prices drop considerably. While investments and employment are expected to rise sharply in the eurozone in the forthcoming period, there are certain risks that might result in an economic slowdown. In addition to the oil price increase, one of the risks is related to a possible strengthening of the euro against the US dollar, which would adversely affect EMU countries' exports. Another risk is posed by a potential further increase in current real estate prices, already overblown in some countries, due to continued interest rate rise.

Euro and US dollar exchange rate movements in the first half of 2006 were primarily under the influence of expectations related to Fed and ECB key interest rate trends. Specifically, the appreciation of the euro against the US dollar and a generally enhanced investor confidence in the European currency were primarily due to the expectations that the Fed would reach or near its neutral interest rate by raising the key rate, for the seventeenth consecutive time, to 5.25% in June 2006, as well as to the speculations that the ECB would continue with monetary tightening and further increase the key rate. The euro also strengthened on account of the economic upturn in the eurozone, especially marked in the second quarter 2006, constantly high US current account deficit and uncertainty related to its long-term sustainability. One of the reasons for the high deficit is a negative trade balance of the US with China, which was not even improved by the appreciation of the yuan, strengthening against the US

Figure 6 Key European and American Interest Rates



Sources: ECB and Fed.

dollar by 4.2% from July 2005 to September 2006. In addition, with the US real estate market still overvalued, the impending price adjustments could adversely affect consumption, investments and employment. The main improvement in the US was made in the fiscal area, due to higher than planned budgetary revenues in the first half of 2006, with the administration focused on reducing the budgetary deficit to a level which would enable the US to cope with the expected economic downturn, demographic pressures and global imbalance, which it had to a great degree produced.

Rising crude oil prices continued to pose the greatest risk to the forecast high growth rates of the world's economy. Ranging mostly between USD 60 and USD 70 per barrel in the first quarter 2006, the same as in late 2005, crude oil prices continued to grow in the second quarter, crossing the psychological limit of USD 70 per barrel. The price growth was in consequence of the threat of Iran, the world's fourth largest oil exporter, to stop oil deliveries and block the sea routes crucial for oil shipments in response to the demand to halt its nuclear activities posed by the rest of the world. In addition, oil prices were also influenced by problems with oil deliveries from Nigeria, the largest African oil exporter. Having briefly stabilised at the end of the second quarter 2006, crude oil prices continued to grow, nearing USD 80 per barrel in July and August, which was a result of growing instability in the world caused by the Lebanon war, technical problems with a US oil pipeline and the start of the hurricane season threatening oil production. However, despite continuing political turmoils, September 2006 saw a considerable and slightly unexpected decrease in oil prices, ranging about USD 60 per barrel at the month's end. These developments had a significant influence on the retail prices of refined petroleum products, and indirectly on the prices of other goods and services, putting upward pressures on inflation in Croatia and many other countries in 2006.

In addition to rising oil and raw materials' prices, a continuing growth of the global economy, including Croatia's, could be threatened by the tightening of financing conditions arising from the increase in US and EMU key interest rates and the growing global imbalance: the US current account deficit on the one side and excessive surpluses of Asian countries and oil exporters on the other. In such circumstances, the American economy is extremely vulnerable to possible fluctuations in capital inflows for the current account deficit financing. A plummet in capital inflows could very likely lead to a depreciation of the US dollar, which would cause an upward pressure on US long-term interest rates and, in turn, adversely impact global economic growth. In addition, negative balance of payment results jeopardise the continuation of positive trends in many developing markets, especially in Europe. Additional risk for these countries, including Croatia, involves excessive loan growth, hence a recommendation from international financial institutions to these countries to achieve fiscal consolidation and control public debt with an aim to retain foreign investors' confidence, as well as to conduct supervision and enact adequate legislation to prevent an excessive loan growth to the non-financial sector and alleviate related risks. Further monetary tightening is recommended to the countries with rising inflation.

Table 2 Global Forecast of Key Economic Indicators for 2006, in %

	GDP, real year-on-year rate of growth	Inflation, year-on-year rate	General government account, as % of GDP	Current account, as % of GDP
World	5.1	3.8		
Major advanced countries	2.9	2.6	–3.2	–2.4
EU	2.8	2.3	–2.4	–0.5
EMU	2.4	2.3	–2.0	–0.1
Emerging markets	7.3	5.2		4.9
Central and Eastern Europe	5.3	5.3		–5.7

Source: IMF, World Economic Outlook Database, September 2006.

4 External Debt

External debt of the Republic of Croatia stood at EUR 27.48bn at the end of June 2006, an increase of EUR 1.94bn (7.60%) over the end of 2005 and of EUR 3.22bn (13.3%) compared with the end of June in 2005. The external debt to GDP ratio improved by 2.1 percentage points over the first half of 2006, standing at 84.6% at the end of June. The external debt to GNI[2] ratio increased by 2.4 percentage points in the first half of 2006, reaching 87.6% at the end of June. Under World Bank criteria,

2 Gross national income (GNI) is calculated as the sum of gross domestic product and the balance of payments' factor income account.

such external debt to GNI ratio[3] places Croatia among highly indebted countries. However, external debt as percentage of goods and services exports, which stood at 171.0% at the end of June 2006, was well below 220%, a level that would indicate potential external liquidity problems under the same criteria. However, it should be taken as a warning sign that this indicator had risen sharply from 124.6% in 2001. It remained relatively favourable primarily due to high revenues from services rendered in tourism, which are expected to grow in the forthcoming medium-term period, but are also extremely susceptible to negative external factors.

Table 3 Selected Indicators of External Debt and External Liquidity for the Republic of Croatia

Debt stock indicators	31/12/2001	31/12/2002	31/12/2003	31/12/2004	31/12/2005	30/6/2006
External debt as % of GDP	60.7	61.5	75.5	80.2	82.5	84.6
External debt as % of GNI	62.3	63.0	78.8	82.1	85.2	87.6
External debt as % of goods and services exports	124.6	135.3	150.8	160.0	167.3	171.0
Gross international reserves as % of external debt	39.6	37.5	33.1	28.3	29.1	31.8
Gross international reserves in months of goods and services imports	5.3	4.9	5.2	4.8	5.1	5.6
Debt flow indicators						
Principal and interest payments as % of exports (goods and services)[a]	26.2	27.4	20.1	21.3	24.1	27.7
Interest payments as % of goods and services exports[a]	6.2	5.7	4.6	4.6	5.0	5.0

[a] Inclusive of 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.

External debt service burden measured as the ratio of debt repayments to goods and services exports, trending upwards since 2003, amounted to 27.7% at the end of June 2006. This indicated that Croatia allocated over one fourth of its total goods and services export revenues for external debt servicing. As the ceiling on this ratio is set at 30%,[4] with its continued growth at this pace the RC could very soon be included into the group of countries heavily burdened with external debt repayments. To prevent this, economic policy should continue to push growth over the levels of the past several years, making sure that it outpaces the country's total external debt growth.[5]

In contrast with 2005, when the highest increase in the external debt of domestic

3 Under the World Bank classification, external debt of a highly indebted country exceeds 80% of GNI and/or 220% of goods and services exports.

4 Babić, M. and A. Babić (2003): Međunarodna ekonomija, p. 471.

5 Croatian National Bank, Analysis of the External Debt of the RC, April 2006.

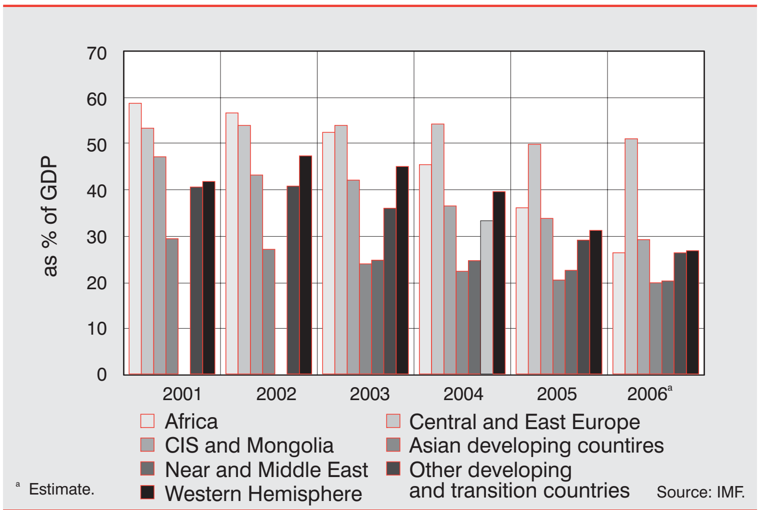
sectors, both in absolute and relative terms, was recorded by other domestic sectors,[6] in the first half of 2006 this was the case with the banking sector, whose external debt grew by EUR 1.3bn (14.5%), accounting for two thirds of the total external debt increase of all the domestic sectors in that period. The slowdown in external debt accumulation of other domestic sectors (especially enterprises) could, among other things, be ascribed to bank placements to enterprises rising by a sharp HRK 8.0bn (13.6%) in the first half of 2006 from HRK 3.0bn (6.0%) in the same period in the previous year. The share of government debt in total external debt reduced from 27.6% to 24.0% in the first half of 2006, primarily in consequence of a decrease in outstanding foreign bonds (the Samurai bond repayment in February, the repayment of a eurobond in March, and a regular semi-annual debt repayment to the London Club in January). In line with the government's reliance on the domestic financial market for the financing of the deficit, new external borrowings were low. However, domestic government financing also indirectly increased external liabilities of other domestic sectors, especially banks, from which the government borrowed much larger amounts than in the previous years, while banks partly financed loans to the government from foreign sources.

The greatest risk for Croatia's external debt servicing in the remaining part of 2006 and in 2007 arises from the announced interest rate growth in the EMU. This is because banks' external commitments are mostly contracted at a variable interest rate based on the EURIBOR, while the market expects the ECB's main interest rate to continue growing and reach 3.5% until the end of 2006 as a consequence of its anti-inflation strategy. A similar effect could be produced by a further increase in the risk premium on the debt of countries like Croatia if the rise in American and European interest rates prompts global investors to redirect their funds into these areas. Such developments could also lead to depreciation pressures on the kuna and, given the continuation of the current external debt growth trend, have an additional negative impact on the accumulated debt repayment burden.

The external debt to GDP ratio places Croatia among the most indebted countries. Specifically, data for the end of 2005 suggest that the external debt to GDP ratio, ranging around 50% for quite a few years, classifies the CEE region as the world's most indebted, and this ratio is considerably lower than Croatia's. Even more important is the fact that the external debt to GDP ratio has been on the decline in the last few years in all the observed regions and is likely to continue the trend in the second half of 2006 (except for a slight anticipated increase in the Central and East Europe), which is probably not going to happen in Croatia judging by the developments in the first half of 2006. In addition, Croatia's debt service to goods and services exports ratio, a reflection of the external debt service burden, has begun to stand above the av-

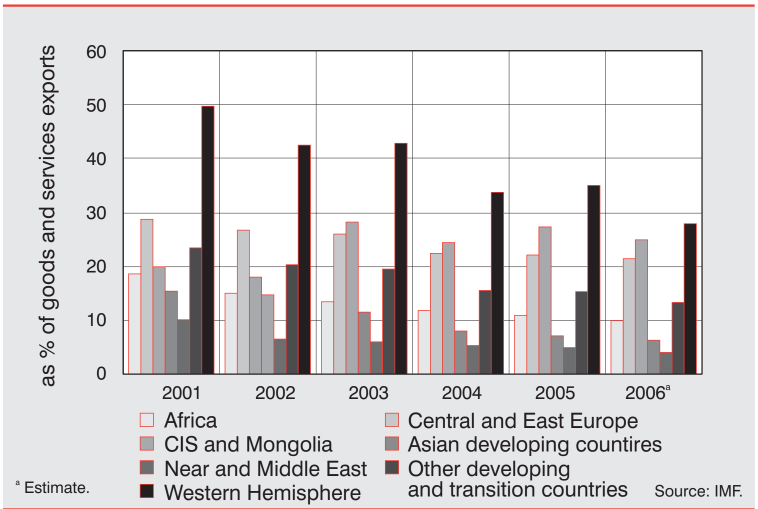
6 Other domestic sectors include: other banking institutions, non-banking financial institutions, public enterprises, mixed enterprises, other companies, non-profit organisations, craftsmen and traders as well as households.

Figure 7 External Debt Across the World



erage for CEE countries, and is exceeded only by the ratios for the CIS and Mongolia, as well as for the countries of the Western Hemisphere (including the North, Central and South America), which is not going to last long if Croatia's ratio continues to grow while the ratio for the said regions declines further.

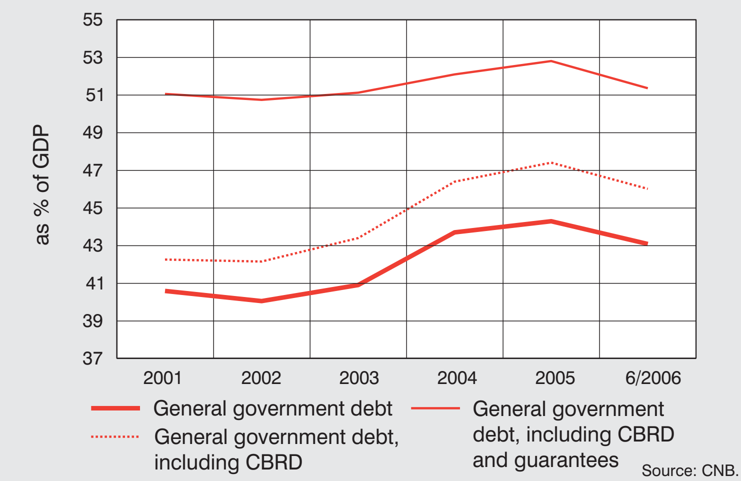
Figure 8 External Debt Burden Across the World



5 Public Debt

The ratio of the general government debt, excluding guarantees, to GDP stood at 43.1% at the end of June 2006, holding steady below the Maastricht criterion of 60%.[7] Moreover, the first half of 2006 saw this indicator fall, following a several-year increase, from 44.3% of GDP at the end of 2005. This was primarily in consequence of general government debt rising by a mild HRK 1.1bn in absolute terms in that period (compared with HRK 6.6bn in the same period in 2005). This could be attributed to continued fiscal consolidation, but also to a budget deficit reduction and, consequently, lower new borrowing requirements. In addition, the strengthening of the kuna exchange rate versus major foreign currencies also had an impact on the nominal general government debt slowdown. In the comparable CEE countries, the highest general government debt to GDP ratios were at the end of 2005 recorded in Hungary (58.4%), Poland (42.5%) and Slovakia (34.5%).

Figure 9 Public Sector Debt



Source: CNB.

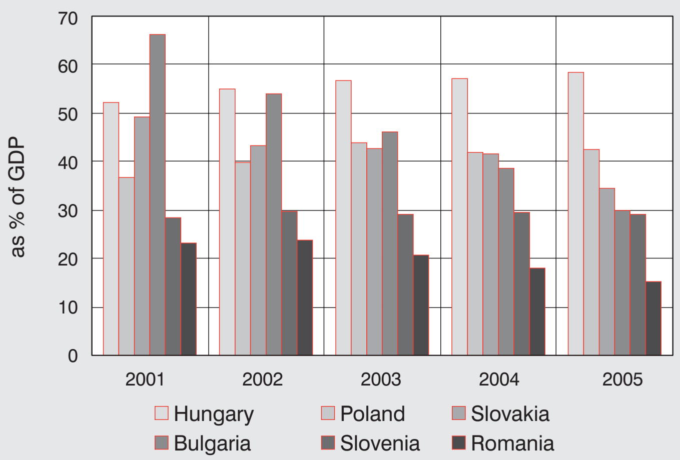
Total public sector debt (general government debt and CBRD debt, without non-exercised government guarantees) also drifted higher, reaching HRK 109.7bn at the end of June 2006, while its ratio to GDP amounted to 46%, dropping for the first time after a several-years' growth. This was also a result of an absolute decrease of HRK 136.7m in total CBRD debt in the observed period. With HRK 12.8bn of issued government guarantees,[8] public debt totalled HRK 122.4bn at the end of the second half of 2006 and its ratio to GDP also decreased, to 51.4%.

In a continuation of the trends observed in 2005, the increase in public sector debt (inclusive of general government debt and CBRD debt and exclusive of non-exercised

7 Under this criterion, public debt includes only general government debt without issued guarantees.

8 This definition of public debt is provided by the Budget Act (Official Gazette 96/2003).

Figure 10 Consolidated General Government Debt in Central and Eastern European Countries



Sources: Eurostat and IMF.

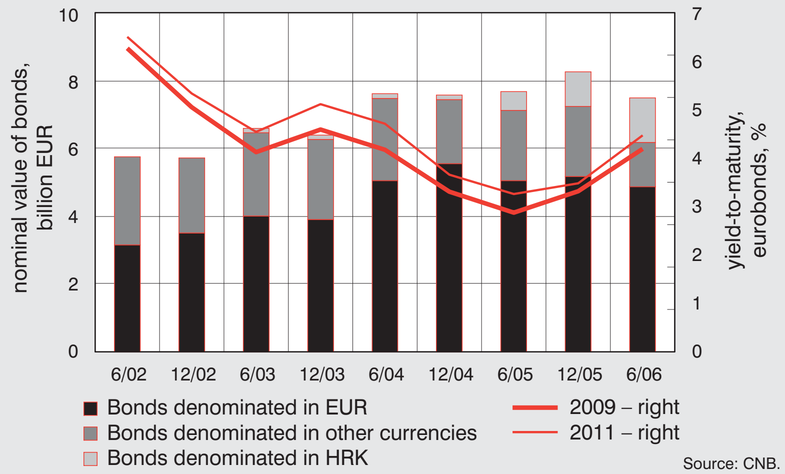
government guarantees) was in the first half of 2006 completely generated by borrowing in the domestic financial market. The domestic component of the debt rose by HRK 5.3bn from the end of 2005, with its ratio to GDP standing at 25.9% at the end of June. The foreign debt component also dropped, by HRK 4.1bn, reducing its ratio to GDP to 20.1% at the end of June 2006.

Although on the downward trend, the still high external general government debt to total public debt ratio exposes Croatia to interest rate risk in external refinancing, as already confirmed by a rise in Croatian eurobond yields in the last 12 months. Specifically, yields-to-maturity on Croatian eurobonds due in 2009 and 2011 rose from 2.87% to 4.19% and from 3.26% to 4.47% respectively in the observed period. Domestic loan commitments with variable interest rates are also exposed to interest rate risk. In order to stabilise public debt service expenses, the public debt management strategy for 2006[9] envisages fiscal discipline and a rise in the share of debt with a fixed interest rate in total debt.

In addition to interest rate risk inherent to refinancing, the government also remains exposed to substantial currency risk due to its high external debt to total debt ratio (44.4%). This is accentuated by the indexation of a share of domestic government debt to the euro, notwithstanding the decrease in the share of foreign currency denominated debt in total government domestic debt in 2005 and in the first half of 2006. The share of the nominal value of government and municipal bonds denominated in foreign currency in the total amount of these bonds issued in the domestic market was 66% at the end of June 2006, a decrease of 5 percentage points from the end of 2005 and of 15 percentage points compared with the end of June 2005.

9 A Guide through the 2006 Budget, MoF, December 2005, pp. 22-24.

Figure 11 Republic of Croatia Bonds and Eurobond Yields



Source: CNB.

With an aim to reduce the said currency exposure, the government floated the second tranche (HRK 2bn) of the first-ever 10-year kuna denominated bond, issued in December 2005, raising the bond's total nominal value to HRK 5.5bn. In addition to extending the kuna yield curve, this bond is also important in the context of the alignment of Croatia's economy with the fourth Maastricht criterion related to the stability of long-term interest rates in EU member states. The government issued no foreign currency denominated bonds in the first half of 2006, while a domestic seven-year bond, nominally worth HRK 2.5bn, was issued in the domestic market in July 2006.

6 Non-Financial Corporations[10]

The relative debt burden of the non-financial corporation sector continued growing in the first half of 2006, totalling an estimated 55.8% of GDP at the end of June 2006. The annual growth rate of non-financial corporation debt peaked at an all-time high of 22.8% in the past year. Debt to banks continued to dominate the non-financial corporation debt structure, rising to 56.2% of the total in the first half of 2006, in consequence of a more pronounced shift of non-financial corporations from external financing towards borrowing from domestic banks. The growth of

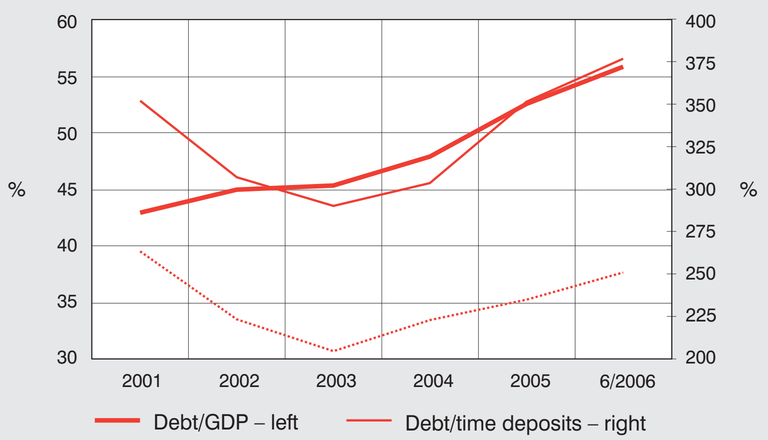
10 The Croatian Bureau of Statistics does not prepare the consolidated balance sheet of the non-financial corporation sector, and the central bank does not prepare a financial survey, but only a monetary survey. Hence, financial assets and liabilities of the non-financial corporation sector can be only roughly estimated on the basis of the monetary survey and unconsolidated balance sheets of financial institutions. An additional source for estimating assets, liabilities, receipts and outlays of the non-financial corporation sector are unconsolidated financial reports of entrepreneurs, which are collected by the Fina.

debt to banks was coupled by the increase in interest paid to banks, up 15.9% last year (compared with 10.1% in 2005). However, the interest burden continued to grow at a slower rate than the debt burden: the share of interest paid to banks in the average debt to banks reduced from 5.23% at the end of 2005 to 5.16% at the end of June 2006. In addition to a slight increase in the share of non-financial corporation debt in total debt, the first half of 2006 also saw a rise in debt to leasing companies (up from 5.4% at the end of 2005 to 5.7% at the end of June 2006). Although this debt component's growth rate of 33.8% was the highest in the past year, it was still considerably below the rate of 70.5% recorded in 2005.

Bank lending to non-financial corporations also increased in the eurozone, with loans to non-financial corporations rising at an annual rate of 11.4% at the end of the first half of 2006, half the growth rate of these loans in Croatia (23.5%). However, Croatia's ratio of these loans to GDP was 31.34% at the end of the first half of 2006, which was considerably below the eruozone ratio of 45.35%. Still, this could soon change if the described growth trend in loans to non-financial corporations continues in the eurozone and in the RC, perhaps causing a drop in liquidity of non-financial corporations in the RC if the debt burden increases too much. This is also corroborated by the trends in the ratio of non-financial corporation debt to time deposits with banks, signalling a possible decrease in these enterprises' liquidity. Specifically, this ratio exceeded 375% at the end of the first half of 2006, reaching the level from late 2001, a period when non-financial corporation sector indicators were much less favourable than now. In contrast with 2001, however, enterprises now have a possibility to invest in varied types of financial assets, so that it is possible that this ratio underestimates their liquidity.

Rather than deteriorating owing to the growth of total debt of this sector, financial performance ratios of non-financial corporations continued improving. Specifically, the (pre-tax) income to expense ratio of non-financial corporations, which had long held

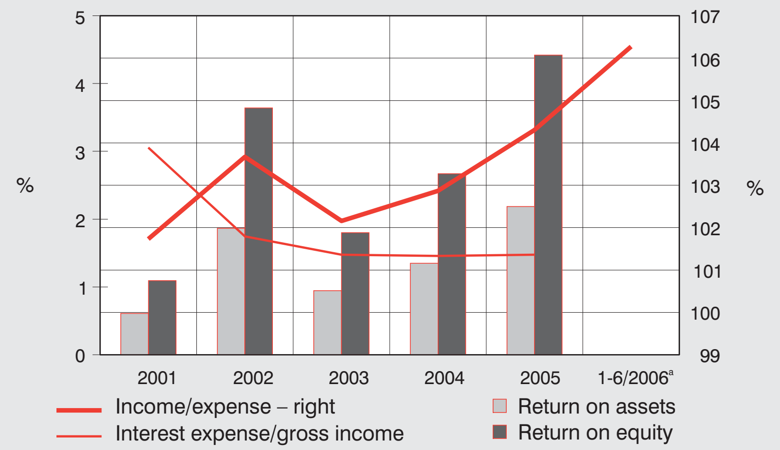
Figure 12 Debt of Non-Financial Corporations, end of period



Sources: CNB, MoF and CNB calculations.

steady, hit a record high of 104.3% at the end of 2005, while the ROA and ROE for non-financial corporations stood at 2.19% and 4.42% respectively in the same period. An estimate based on the Fina data on the business performance of Croatian entrepreneurs in the first half of the year, suggesting a respective increase of 14.1% and 13.6% in income and expenses relative to the same period in 2005, shows that the (pre-tax) income to expense ratio of non-financial corporations could reach an all-time high of 106.3% at the end of the first half of 2006 and continue increasing sharply.

Figure 13 Debt Burden and Profitability of Non-Financial Corporations



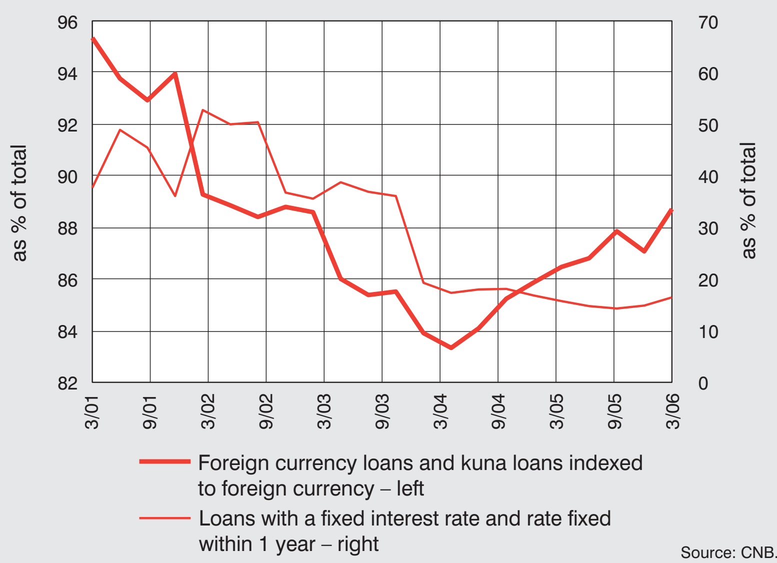
[a] Forecast.

Sources: Fina and CNB calculations.

The weakening of the kuna and anticipated long-term interest rate increase remain the major risks threatening non-financial corporations. Despite the fact that the share of banks' foreign currency corporate loans, inclusive of foreign currency indexed kuna loans, in total long-term corporate loans rose from 87.9% to 88.7% in the last six months, the risk related to the weakening of the domestic currency has not proven significant because continued upward pressures on the kuna in the first half of 2006 reduced the kuna/euro exchange rate to the lowest level since summer 2001. The kuna is also unlikely to depreciate in the second half of the year, especially after the tourist season and considering further government activities in the financial market. As concerns the risk related to the global long-term interest rate growth, the related exposure of non-financial corporations slightly declined after a several-year increase, although the interest rates did grow. Specifically, the share of long-term corporate loans whose interest rates may vary within a year fell from 85.7% to 83.6% of total long-term loans in the first half of 2006.

In the circumstances where more than 90% of bank loans are foreign currency indexed, it is difficult to precisely quantify the currency risk exposure of Croatian enterprises due to a lack of sufficiently detailed statistical data. However, a rough estimate of the direct impact of a more substantial exchange rate disruption on the financial position of non-financial corporations can be made. Based on the annual financial statement data and CNB's monetary statistics, and with some realistic assumptions, one can fairly precisely divide the items of balance sheets and income statements of non-financial corporations into foreign currency and kuna items. An analysis of such data for the end of 2005 shows that a currency crisis (a doubling of the kuna price of foreign currency) would cause the aggregate debt burden of non-financial corporations to increase from approximately 11% to approximately 19% of their total income. This would in the best case scenario sharply reduce the enterprise income to expense ratio from about 104% to a historical low of about 97%. In conclusion, a significant foreign exchange market disturbance would generate considerable losses for the Croatian enterprises in general.

Figure 14 Currency and Interest Rate Risk of Corporate Loans



Source: CNB.

Box 1 Analysis of Business Performance Ratios of Croatian Non-Financial Corporations by Activities

The financial statements of Croatian non-financial corporations, collected by the Fina, have provided a basis for an analysis of some of these corporations' basic performance ratios by activities. The analysis covered the 2003 to 2005 period, with the data for the first half of 2006 relating only to total income and expenses of the corporations.

According to these data, the income of non-financial corporations rose by 14.1% in the first six months of 2006 over the same period in the previous year, while the expenses increased by 13.6% in the same period. The income in almost all the activities grew at a faster rate than expenses, except in transport, storage and communications, hotels and restaurants, agriculture, forestry and fishing, and in financial intermediation.

An analysis of business cost-effectiveness based on the income to expense ratio by the activities suggests that the highest income per unit of expense was, as in the previous years, generated by transport, storage and communications. This comes as no surprise since this activity includes highly successful telecommunication companies. However, due precisely to the mentioned faster growth of income than expenses in these activities in 2006, the income to expense ratio was at the end of June 2006 somewhat lower than at the end of 2005. In two of the remaining activities observed (hotels and restaurants, agriculture, hunting, forestry and fishing), this ratio decreased sharply to below 1.0, its minimum acceptable level.[11] The income to expense ratio in the remaining three observed activities, industry, trade and construction, was on the increase since 2004, especially marked in the first six months of 2006.

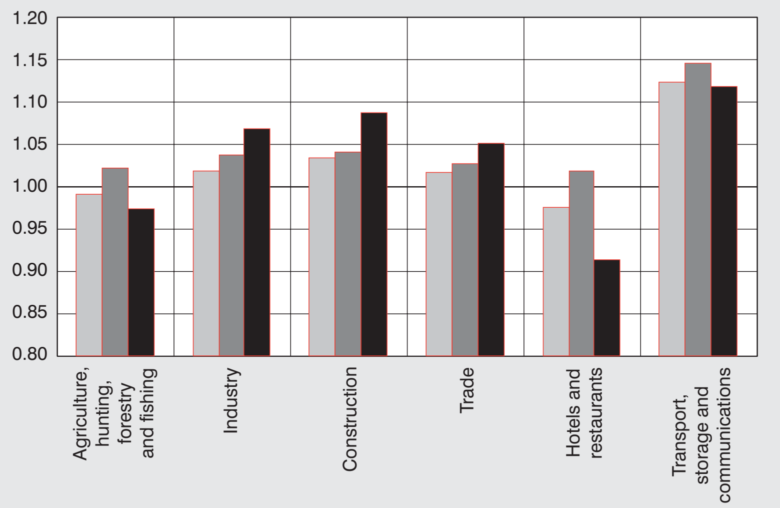
Other business performance ratios were also the highest in transport, storage and communications, with the data available only for the period until the end of 2005. For example, the ROAA, standing mostly below 2% in other activities, ranged between 4% and 7% in transport, storage and communications in the observed period, clearly indicating a growth trend. In addition, taking into account only the corporations showing positive business performance, the ROAA in most activities ranged between 2% and 6%, while it increased from 7% in 2003 to 10% in 2005 in transport, storage and communications. The ROAA and ROAE also increased substantially in trade and industry, and at a slower but steady rate in construction.

Of well-performing corporations, those in trade recorded the highest ROAE in 2005, 20.8%, and construction corporations the lowest, only 1.9%.

As the corporation debt burden is usually observed according to a series of ratios

11 Žager, K. and L. Žager (1999): Financial Statement Analysis, Masmedia, Zagreb.

Figure 1 Croatian Corporations' Income to Expense Ratio by Economic Activities

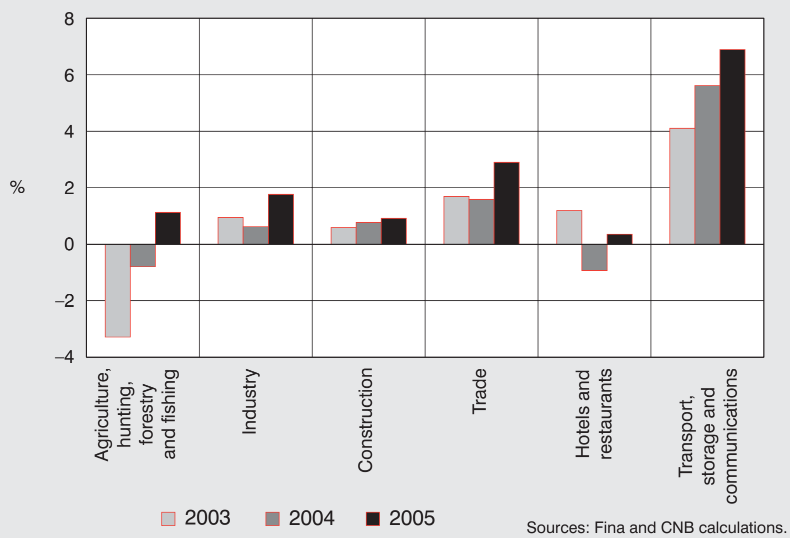


Sources: Fina and CNB calculations.

based on selected balance sheet items, these might be considered as showing static debt. This includes the debt ratio, calculated as total liabilities to total assets. The highest debt ratio among the analysed activities was in the three observed years recorded in trade, with between 70% and 80% of total assets financed by loan capital – liabilities.

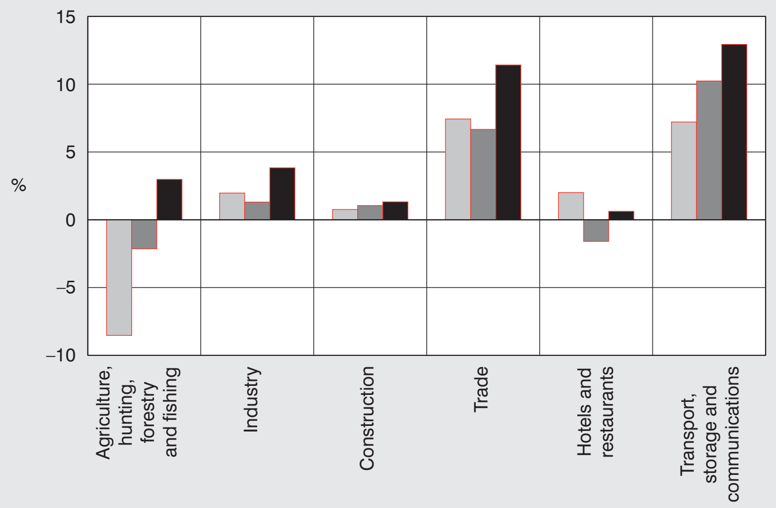
In contrast, the lowest debt ratio was recorded in construction, with total liabilities exceeding total assets by a mere 30% at the end of 2005. The corporations reporting negative business results in the observed period as a rule have higher debt ra-

Figure 2 Croatian Corporations' Return on Average Assets by Economic Activities



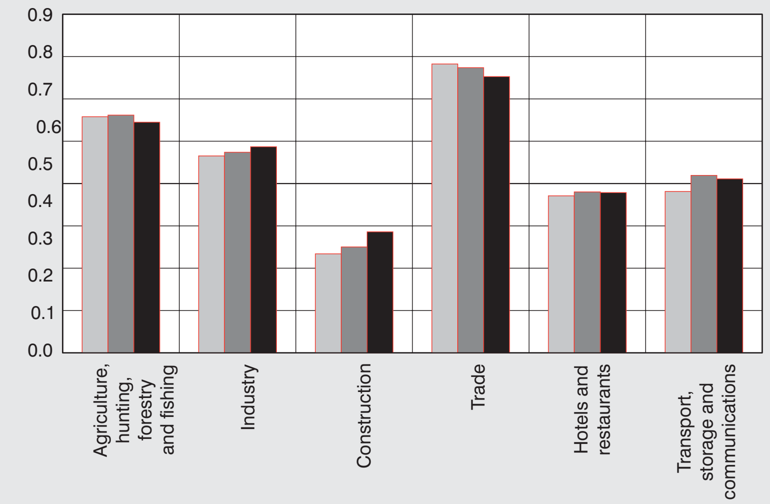
Sources: Fina and CNB calculations.

Figure 3 Croatian Corporations' Return on Average Equity by Economic Activities



Sources: Fina and CNB calculations.

Figure 4 Croatian Corporations' Debt Ratio by Economic Activities

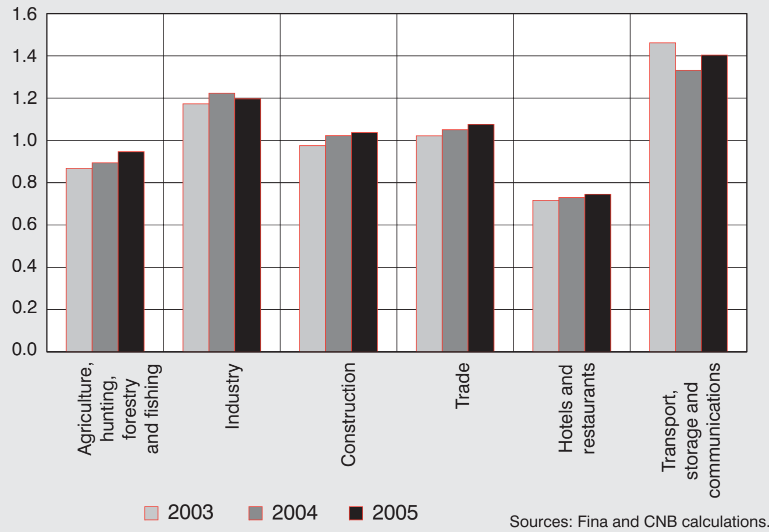


Sources: Fina and CNB calculations.

tios than well-performing corporations. This difference is especially noticeable in construction, where the liabilities to assets ratio stood at about 28% for well-performing corporations, and at 85% for those showing negative business results.

Liquidity ratios measure the capability of corporations to settle outstanding short-term liabilities, one of the most commonly used being the current liquidity ratio, which is the ratio of short-term assets to short-term liabilities. The recommended value of this ratio should exceed one, that is, short-term assets should as much as possible exceed short-term liabilities. The net working capital, extremely important for maintaining current liquidity, represents the ratio of short-term assets to short-term liabilities. The fact that it exists means that short-term assets are partly financed from long-term sources, which is necessary for liquidity maintenance in current payments.

Figure 5 Croatian Corporations' Liquidity Ratio by Economic Activities



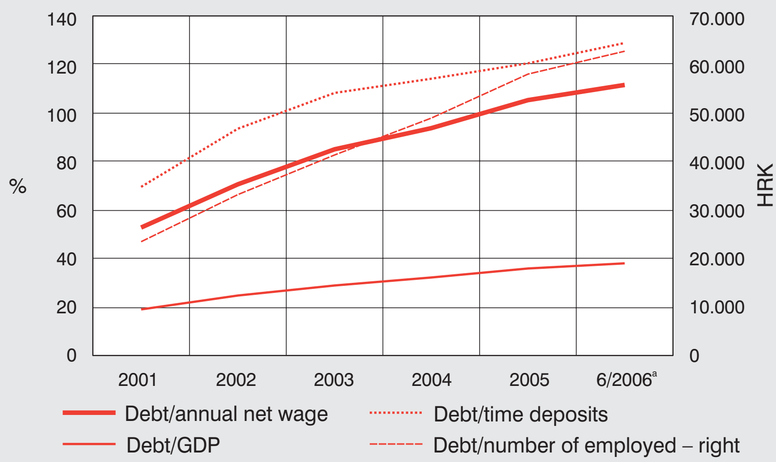
Sources: Fina and CNB calculations.

As expected, transport, storage and communications have the highest current liquidity ratio compared with other observed activities, and hotels and restaurants the lowest. The ratios for almost all the activities suggest liquidity growth, primarily generated by faster growth of short-term assets than short-term liabilities. Considering only well-performing corporations, the current liquidity ratio in all the activities exceeds one, except in hotels and restaurants. On the other hand, liquidity of corporations reporting negative business results was considerably lower than 1 in all the activities.

7 Households[12]

Total household debt continued growing in the first half of 2006. The estimated household debt to GDP ratio rose from 35.9% at the end of 2005 to 38.0% at the end of June 2006. The ratio of household debt to the estimated annual net wage bill showed a similar trend, reaching about 111.6% (compared with 105.2% at the end of 2005). At the same time, the average debt per employed person continued a steady upward trend, rising from about HRK 58 000 at the end of 2005 to about HRK 63 000 at the end of June 2006. The ratio of debt to time deposits with banks rose to about 129% at the end of June 2006.

Figure 15 Household Debt



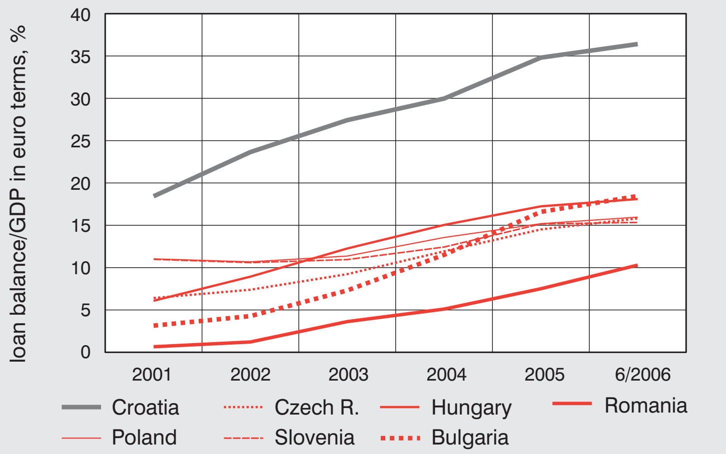
[a] Estimate.

Sources: CNB and CBS.

Accounting for about 96% of total household debt, debt to banks remained the most dominant debt category, due to a surge in supply of increasingly cheaper bank loans continuing since 2002. The annual growth of total household debt slowed down in 2003 and in the first half of 2004, accelerating again at mid-2004, but at a much slower rate than before, standing at 24.1% at the end of June 2006. In comparison with other EU candidate countries and most new member states, Croatia's household debt to banks grows at a relatively low annual rate. However, amounting to 36.4% at the end of June 2006, the ratio of household debt to banks, expressed in euro, to GDP considerably exceeded these countries' ratios of up to 19%.

12 The Central Bureau of Statistics (CBS) does not prepare the consolidated balance sheet of the household sector, and the central bank does not prepare a financial survey, but only a monetary survey. Hence, financial assets and liabilities of the household sector can be only roughly estimated on the basis of the monetary survey and unconsolidated balance sheets of financial institutions. Non-financial assets of the household sector are unknown. The main source for estimating receipts and outlays of that sector is the Survey on Household Consumption, which the CBS carries out once a year.

Figure 16 Bank Claims on Households in Central and Eastern European Countries

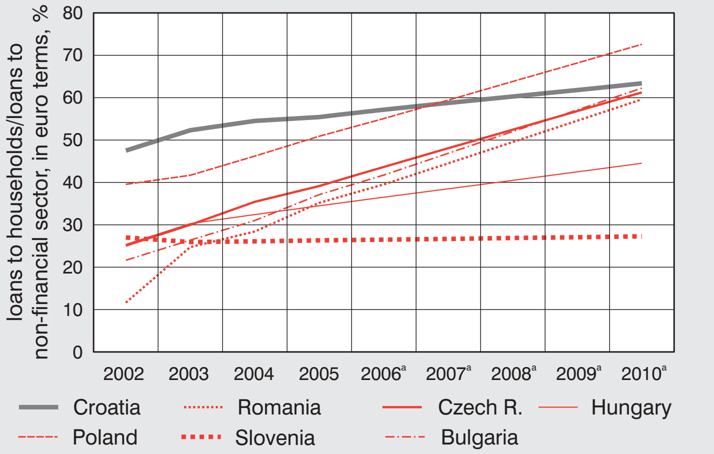


Sources: CNB and central banks of Central and Eastern European countries.

However, what should also be stressed is the impact of the supply of bank household loans on such trends in relative household debt ratios in Croatia and the comparable countries. In other words, the Croatian banking sector has apparently reached a degree of market maturity and competitiveness sooner than the counterpart markets in most of the comparable countries due to its successful rehabilitation, followed by privatisation and consolidation. This means that the banking system development in the comparable countries could soon result in trends in household debt similar to those in Croatia, especially given the similarities in the banking sector ownership structure between most of the observed countries. In proof of this are data on the trends in the ratios of household loans to total loans to the non-financial sector in the selected countries, increasing in all the observed countries, except in Slovenia, at a faster rate than in Croatia in the last two years. A simple projection shows that in five years' time there should be no differences between the relative level of household debt in Croatia and that in most of the comparable countries.

It should also be stressed that in addition to a higher household loans to GDP ratio, Croatia also has a higher household deposits to GDP ratio in relation to comparable CEE countries. Having risen at a modest but steady rate over the last few years, this ratio stood at 43.3% at the end of June 2006 in Croatia, while ranging from 20% to 30% in most of the observed countries. In addition to bank deposits, Croatian households have been increasingly investing into other forms of savings. The assets of open-end investment funds, for example, rose from HRK 1.4bn in 2001 to HRK 12.7bn at the end of June 2006, while some estimates are that household investments account for about 55% of total investment funds' liabilities. In addition, as a result of households turning more and more to housing savings banks, household time deposits with housing savings banks rose from HRK 2bn to HRK 5.5bn from the end of 2002 to the end of 2005 declining, however, to HRK 5.2bn in the first half of 2006,

Figure 17 Bank Claims on Households in Central and Eastern European Countries



[a] Estimate.

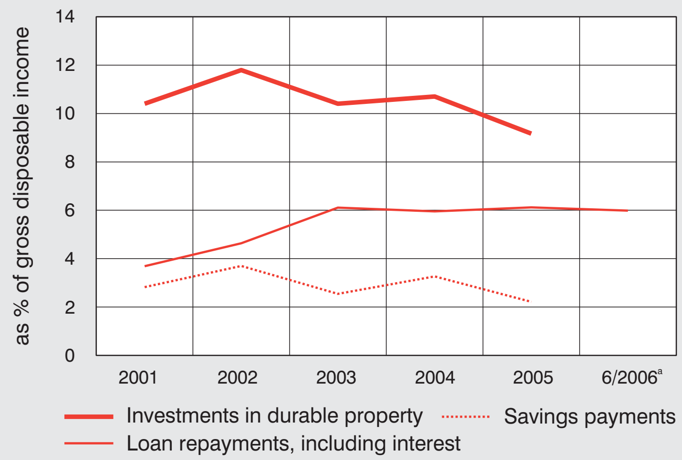
Sources: CNB and central banks of Central and Eastern European Countries.

probably due to the government incentive rate having been cut from 25% to 15% of own funds deposited. However, there are already indications that this adverse effect has been offset by the stimulative impact of a recently introduced inter-financing model, which rules out a minimum two-year saving period as a requirement for a home loan and provides for direct loan extension. In aggregate, household savings in the RC might total about 50% of GDP.

In addition to home loans extended by housing savings banks, households have made an increasing use of banks' home loans. Data show that the share of home loans in total bank loans trended upwards from slightly above 28% at mid-2002. This share was 37.1% at the end of June 2006, which was a significant increase from 33.5% at the end of the same month in 2005, caused by a growth of HRK 8.7bn in banks' home loans in that period. The strong growth could, among other things, be attributed to an excessive aggregate demand for flats in the RC, undiminished by ballooning real estate prices in the last few years. According to a real estate agency *Burza nekretnina d. o. o.*, the average price of a square meter of housing space in Zagreb was EUR 1211 in 2002 and EUR 1790 in the first half of 2006. It is possible that household home loans grow further following the introduction of kuna home loans, which are fully devoid of exchange rate risk. However, as these loans have been introduced only recently and in just one bank in Croatia, the lack of reliable data makes it impossible to precisely assess the related demand. Finally, the price increase in the square meter of housing space in itself contributed to the rise in the nominal value of household home loans, to the extent that it failed to result in the reduction of the average size of housing space purchased by home loans.

Aggregate household debt service indicators still give no reason for concern. The share of the annualised principal repayment with interest in gross disposable income is estimated at 6.0% at the end of June 2006,[13] which means that this indicator stayed almost completely stable since 2003. The fact that the household debt service indicator is not in line with the rise in this sector's total debt could be ascribed to a drop in bank interest rates on long-term household loans from about 12% at the end of 2000 to about 6.5% at the end of June 2006, as well as to a growing supply of loans with increasingly longer terms.

Figure 18 Use of Household Funds



[a] Forecast.

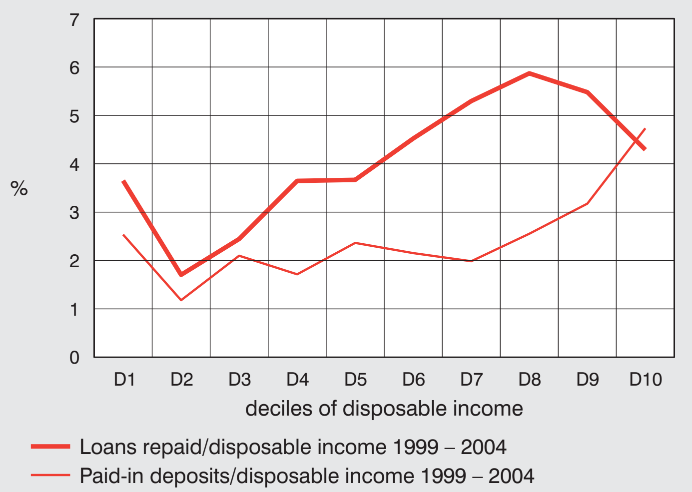
Sources: CBS and CNB calculations.

In addition to analysing the household debt service indicator in aggregate terms, it is useful that it be broken down by deciles of disposable household income. Available to this end are CBS data for the period from 1999 to 2004. While more recent data are yet unavailable, the given data provide for a reliable analysis as they represent the average value for a six-year period. The analysis shows that the debt service burden is the highest between the sixth and eight decile of gross disposable household income. This mostly involves young and educated persons in dependent employment whose loan demand is the greatest, but who dispose with relatively low savings. For example, the population between the first and fifth decile, while disposing with almost equal savings as that in the sixth and seventh decile, has a severalfold lower debt burden. As expected, the richest population segment, in the ninth and tenth decile, has a lower debt service burden and the highest savings.

The ratio of foreign currency indexed loans to the total gross value of long-term household loans drifted slightly lower in the first half of 2006, by about 0.6 percentage points, to stand at around 87.6% at the end of June. Although it decreased sharply from above 97% at the end of 2001, this ratio has remained high due to the specifics of the Croatian economy, continuing to directly expose households to a high currency risk. High

13 The estimate is based on trends in long-term household loans and trends in GDP, population number and net wage bill.

Figure 19 Household Debt Burden to Disposable Income

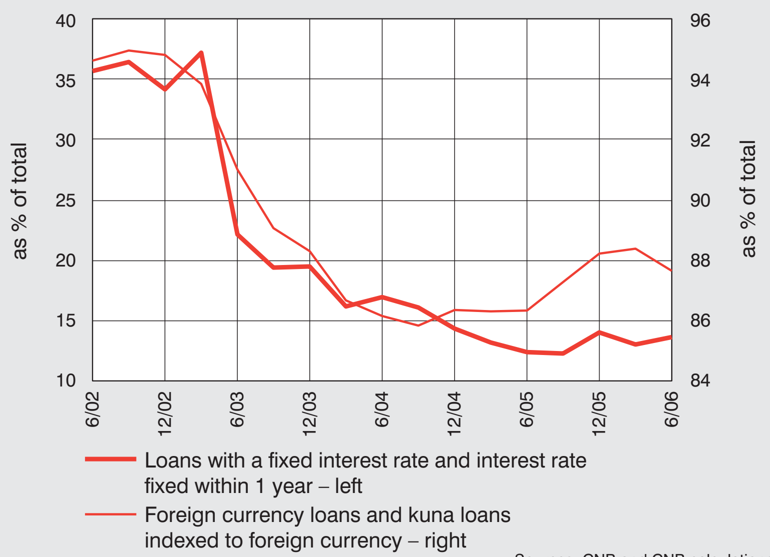


Sources: CBS and CNB calculations.

interest rate risk exposure also remained virtually unchanged in the first six months of 2006: the ratio of loans with the remaining maturity longer than one year to total household loans, whose contracted interest rate is unalterable in the period shorter than one year, remained at approximately the same level of only 14% in the first half of 2006.

The exposure of the household sector to currency risk was further aggravated by the rise in household loans in Swiss francs or indexed to Swiss francs. This is because the kuna/Swiss franc exchange rate fluctuates more than the kuna/euro exchange rate, since domestic monetary policy is oriented towards achieving the kuna/euro exchange rate stability. At the same time, the ratio of loans denominated in Swiss francs

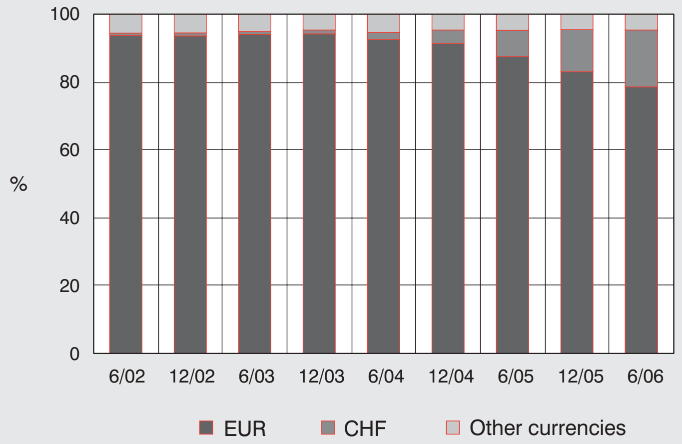
Figure 20 Currency and Interest Rate Risk of Household Loans



Sources: CNB and CNB calculations.

to total foreign currency loans and loans indexed to foreign currency extended to the domestic non-financial sector[14] stood at 1.1% at the end of 2003, increasing sharply to 16.8% by the end of June 2006.

Figure 21 Currency Structure of Loans Indexed to Foreign Currency and Foreign Currency Loans Extended to Non-Financial Sector



Source: CNB.

8 Financial Intermediation

The share of bank assets in total financial sector assets declined further in the first half of 2006, standing at 76% at the end of June. The share of leasing companies was the second highest, holding to the estimated 6.2%, while insurance companies came third with a share that had drifted lower to 5.0%. Mandatory pension funds managed 3.8% of the financial sector assets, with a surge in these intermediaries' assets, in both relative and absolute terms, continuing since 2002. The share of open-end investment funds also recorded a steady increase, accounting for 3.5% of the financial sector assets at the end of June 2006. The funds established pursuant to special legislation, i.e. the War Veterans' Fund and the Pensioners' Fund jointly accounted for 2.7% of the financial sector assets. Housing savings banks, closed-end investment funds, savings and loan associations and voluntary pension funds managed the least assets in the Croatian financial market at the end of the first half of 2006, 1.5%, 0.6%, 0.5% and 0.1% of the total respectively.

According to preliminary data, the assets of the leasing companies reporting to the CNB stood at HRK 22.2bn at the end of June 2006, an increase of 10.2% from the end of 2005. However, is possible that the share of leasing companies in the financial

14 Due to the lack of data on the currency structure of household loans indexed to foreign currency and foreign currency loans, data for the total domestic non-financial sector are used as reference.

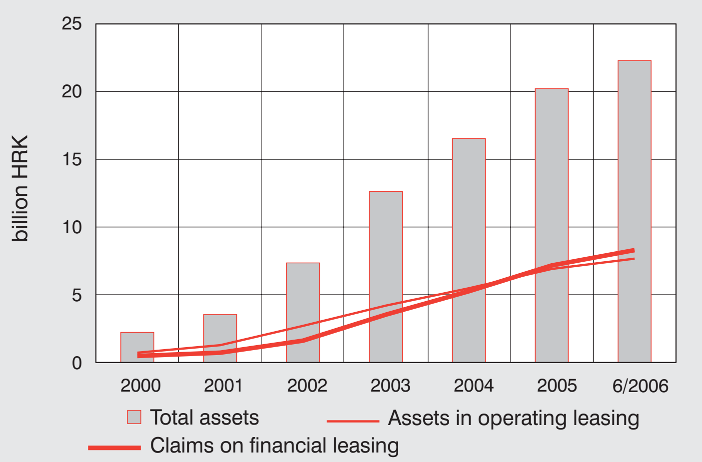
Table 4 Relative Importance of Financial Intermediaries, shares in total financial intermediaries' assets, end of period, in %

		12/1999	12/2000	12/2001	12/2002	12/2003	12/2004	12/2005	6/2006
1.	Banks, consolidated gross assets	87.7	87.0	87.5	85.0	83.3	81.4	78.7	76.0
2.	Open-end investment funds, net assets	0.02	0.2	0.9	1.4	1.4	1.8	2.8	3.6
3.	Closed-end investment funds	2.6	3.0	2.3	1.6	0.4	0.4	0.5	0.6
	o/w: PIFs	2.0	0.2						
4.	Funds established pursuant to special legislation							0.7	2.7
	o/w: War Veterans' Fund							0.7	0.6
	o/w: Pensioners' Fund								2.0
5.	Insurance companies	7.2	6.8	5.9	5.7	5.4	5.2	5.1	5.0
6.	Housing savings banks, consolidated gross assets	0.1	0.4	0.8	1.1	1.5	1.8	1.8	1.5
7.	Mandatory pension funds, net assets				1.1	2.0	2.9	3.6	3.8
8.	Voluntary pension funds, net assets					0.0	0.0	0.1	0.1
9.	Savings and loan associations[a]	1.1	0.9	0.6	0.6	0.6	0.5	0.5	0.5
10.	Leasing companies[a]	1.3	1.7	2.0	3.6	5.4	6.0	6.2	6.2
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[a] Preliminary data.
Sources: CNB, HANFA and MoF.

intermediaries' assets decreases following the adoption of a leasing act, as it to prohibit leasing companies to extend loans. At the end of June 2006, financial leasing accounted for 37.2% of total leasing companies' assets, and operating leasing for 34.4%. Personal vehicle leasing still predominated in operating leasing and real estate leasing in financial leasing. The assets of leasing companies continued to be almost completely denominated in foreign currency.

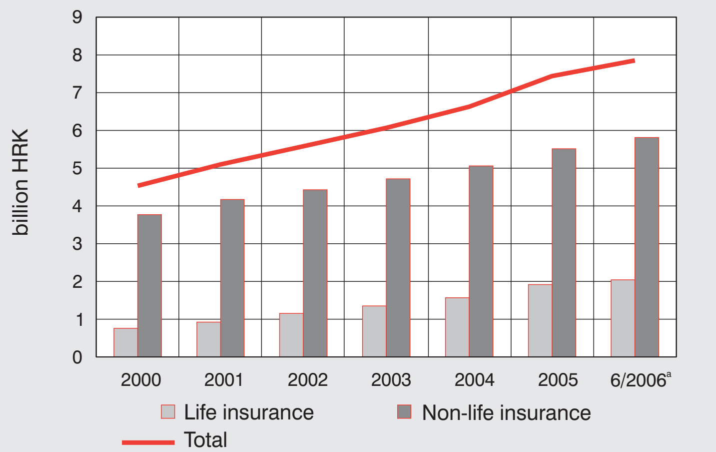
Figure 22 Leasing Companies' Assets



Sources: Fina data based estimates for the period 1999-2002 and CNB data as of 2003.

The assets of insurance companies, having grown at a slower rate than other financial intermediaries' assets for a number of years, reduced their share in this sector's total assets. However, the pace of this reduction slowed in the last few years. The annual increase in gross insurance premiums collected in the past year (by the end of June 2006) was 5.6%, but life insurance did not grow at much higher rates than non-life insurance in this period, as was the case in the previous years. Specifically, total gross life insurance premiums collected in the past year rose by 6.4% and non-life insurance premiums by 5.3%. Non-life insurance remained the major form of insurance, with 74.0% of gross insurance premiums collected last year relating to this form of insurance.

Figure 23 Calculated Gross Insurance Premiums



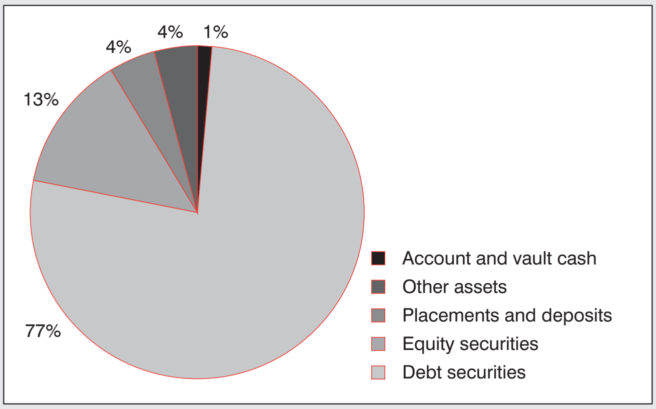
a In the last year.

Source: HANFA.

The assets of mandatory pension funds also increased, due to a continued rise in the number of the insured paying contributions to the second pillar, standing at 1.3 million in June 2006. According to the data of the Croatian Financial Services Supervisory Agency (HANFA), the assets of mandatory pension funds totalled HRK 13.5bn at the end of June 2006, rising by 17.7% from the end of 2005. The lion's share, 76.8%, was invested into debt securities and 69.4% of this in government bonds, which was still below 82.6% and 72.3% respectively at the end of 2005. At the same time, the share of equity securities rose from 10.6% to 13.2%.[15] These funds' average nominal return was 7.4% in the last observed twelve months.

15 The investment structure of mandatory pension funds is prescribed by legal provisions, which set the amount and types of domestic and foreign securities in which mandatory pension funds may invest. At least 50% of mandatory pension funds' assets has to be invested in long-term bonds and other long-term debt securities issued by the Republic of Croatia and the CNB, whereas investments into shares of joint stock companies and stakes in domestic closed-end investment funds are allowed up to the amount of 30% of the fund's assets, provided that the said shares are officially listed on the stock exchange (currently only six shares fulfil this requirement). Mandatory pension funds may invest up to 15% of their assets in foreign securities.

Figure 24 Mandatory Pension Funds' Asset Structure, as at 30 June 2006



Source: HANFA.

Having increased by 135% in 2005, the net assets of voluntary pension funds rose by 31.4% in the first six months of 2006, amounting to HRK 299.2m at the end of June. With the resulting share in financial sector assets of 0.1%, voluntary pension funds were the smallest intermediaries on the Croatian financial market. Open-end voluntary funds accounted for about 89% of voluntary pension funds' net assets. The share of debt securities, while remaining the largest in these assets, dropped from 79.3% to 62.6% in the first six months of 2006, while the share of equity securities expanded from 14.6% to 31.5%. The average return of open-end pension funds was 10.3% in the last twelve months observed. There are also nine closed-end pension funds currently operating in Croatia. The annual return of the six of the nine closed-end funds operating in the last year observed averaged 13.2%.

Table 5 Pension Funds' Annual Returns, as at 30 June 2006, in %

Mandatory	Return	Voluntary	Return	Closed-end volunatry	Return
AZ OMF	7.41	AZ benefit ODMF	9.67	AZ VIP ZDMF	16.23
Erste Plavi OMF	7.82	AZ profit ODMF	17.08	AZ Dalekovod ZDMF	16.11
PBZ/CO OMF	6.77	Croatia osiguranje ODMF	6.73	AZ Hrvatska kontrola zračne plovidbe ZDMF	16.58
Raiffeisen OMF	7.55	Erste Plavi Expert ODMF	15.29	CROATIA OSIGURANJE ZDMF	–
Mirex[a]	7.40	Erste Plavi Protect ODMF	6.54	Ericsson Nikola Tesla ZDMF	11.12
		Raiffeisen ODMF	6.62	Hrvatski liječnički sindikat ZDMF	16.67
				Sindikat pomoraca Hrvatske ZDMF	2.65
				Novinar ZDMF	–
				ZDMF HEP grupe	–

Note: Funds for which data are not shown started operation after June 2005.
[a] Mirex is the value of an average MPF accounting unit and it is calculated as the weighted arithmetic mean. The weight indicates the share of a fund's net assets in total net assets of all funds.
Source: HANFA.

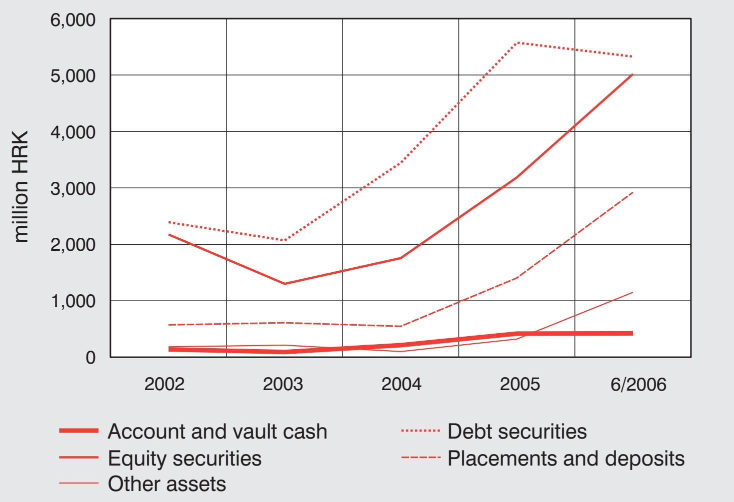
There were 54 open-end investment funds operating in the Croatian market at the end of June 2006, i.e. 14 equity funds, 12 mixed investment funds, 14 money market funds and 14 bond funds. The net assets of all the open-end investment funds totalled HRK 12.0bn at the end of June 2006. The largest share was again generated by money market funds, whose net assets amounted to HRK 4.7bn. Mixed investment funds came second with HRK 4.1bn in net assets, and were followed by equity funds and bond funds, whose net assets were HRK 1.8bn and HRK 1.3bn respectively. Having neither entrance nor exit fees, money market funds are very attractive to investors (primarily enterprises) who realise profit by investing their excess liquidity even for a few days. There are several reasons behind the increase in equity and mixed investment funds assets. Firstly, with capital market yields exceeding bank deposit yields for some time already, both households and companies are increasingly more prepared to take somewhat greater risks in order to realise considerably higher yields. Secondly, in addition to the usual reasons for investing in investment funds instead of directly in securities, there is also the fact that a high unit price of many securities prevents small investors from easily accessing the Croatian capital market. In contrast, the minimum required stake in a fund most often does not exceed a few hundred kuna and some funds offer investment plans, meaning that by making small monthly investments one can gradually create one's own investment portfolio.

There are several reasons for presenting the Pensioners' Fund and the Croatian War Veterans' Fund separately in Table 4. Both funds were established pursuant to special legislation and their characteristics make them unclassifiable as either open-end or closed-end funds. In addition, each of the two funds, jointly accounting for 2.7% of the Croatian financial sector assets, is larger than any other investment fund. Classic closed-end investment funds, accounting for 0.6% of the financial sector assets, belong within the group of smaller financial intermediaries. Two of the seven closed-end investment funds are registered as real estate funds, even though they owned no assets at the end of June 2006. The other closed-end investment funds managed net assets totalling HRK 2bn.

Savings and loan associations (109) are still the most numerous group of financial intermediaries in the Croatian financial market. Their assets were estimated at HRK 1.8bn at the end of June 2006. Although these financial intermediaries have changed neither in terms of their number nor in terms of their share in the total financial sector assets in the last five years, their future prospects will be considerably influenced by a new credit institution act. Specifically, as required under EU rules, savings and loan association aiming to operate as profit institutions will probably have to increase their share capital to HRK 8m and become savings banks. As this requirement could pose a problem for most of these financial intermediaries with weak capital, another option for them is to continue operating as savings and loan associations, while adhering to the principles of non-profit institutions and granting loans solely to their members.

While the number of housing savings banks rose to 5 in the first six months in 2006,

Figure 25 Overall Trends in the Asset Structure of Pension Funds (open-end, closed-end and War Veterans' Fund)



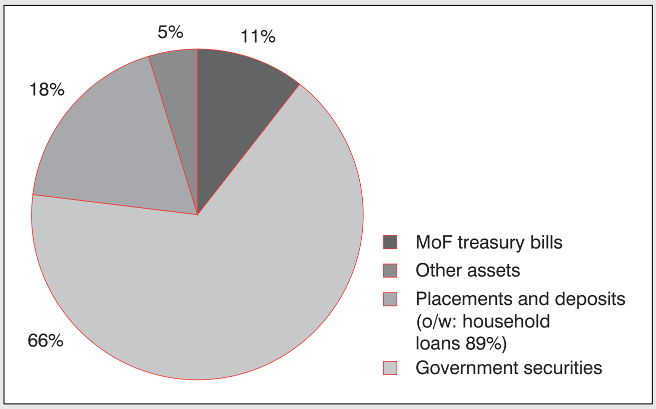
Source: CNB.

their assets reduced from HRK 5.8bn at the end of December 2005 to HRK 5.5bn at the end of June 2006.[16] Long-term government securities continue to prevail in the asset structure of housing savings banks, with a share that expanded from 54.4% to 60.9% in the last six observed months. The share of MoF T-bills declined (from 12.7% to 10.6%), and the share of placements and deposits (from 27.9% to 18.3%), while other assets held steady at 5% of total assets. At the same time, due to the changes introduced to the legislative framework for the operations of housing savings banks, the share of household loans in their total assets almost doubled in the first half of 2006, amounting to 17.4% at the end of June. However, due to investments in government securities, the structure of total placements and contingent liabilities of housing savings banks was mostly made up of placements carrying the lowest risk.

Housing savings banks recorded weak business results in the last 12 months. Their aggregate loss at the end of the first half of 2006 was reported at HRK 72.9m, which means that their annual operating results were negative at the end of June, with a loss of HRK 54.0m. The loss was primarily generated by the revaluation of non-tradable securities which are carried at fair value, i.e. by the revaluation of RC kuna bonds, whose price suffered a sharp decline. This led to a decrease in the net non-interest income of housing savings banks, which stood at only HRK 0.5m in the last year observed. It should also be noted that the impairment loss and provisions for identified losses doubled in the last year from 2005, which can be attributed to a rise in the share of non-government debt securities, amounting to HRK 320m at the end of June 2006 (compared with HRK 10m at the end of 2005).

16 HPB stambena štedionica d.d. Zagreb started operating in April 2006.

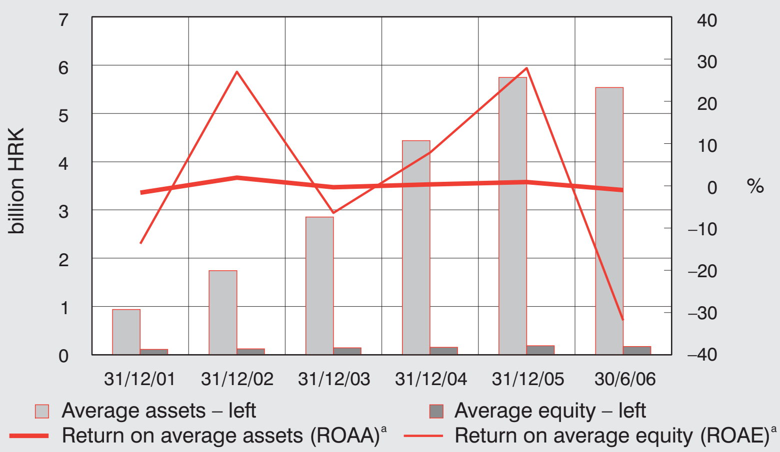
Figure 26 Housing Savings Banks' Asset Structure, as at 30 June 2006



Source: CNB.

The cut in the government incentive rate from 25% to 15%, which reduced the incentive from HRK 1250 to HRK 750 per annum, as provided for by the amendments to Act on Housing Savings and Government Incentive to Housing Savings, was one of the major factors negatively affecting housing savings banks' operations. Public interest in this form of saving waned because of this change, but also due to a growing interest in investing in investment funds. As a result, housing savings banks had weak indicators, with the ROAA for the observed year (inclusive of June 2006) dropping from 0.9% at the end of 2005 to –1.0% at the end of June 2006. The ROAE experienced a much higher drop, decreasing from 27.9% at the end of 2005 to –31.8% at the end of June 2006. These indicators would have been even weaker had the average assets not dropped by 3.6% and the average equity by 9.5% in that period.

Figure 27 Housing Savings Banks' Performance



[a] ROAA is calculated from pre-tax profit, and ROAE from after-tax profit.

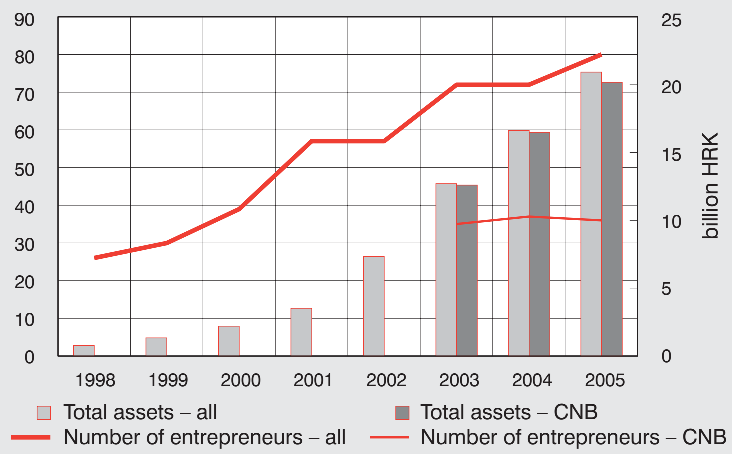
Source: CNB.

Box 2 Leasing Statistics Development

CNB monetary statistics show that the 36 leasing companies registered in the RC managed assets worth more than HRK 20bn at the end of 2005, accounting for 6.2% of the total assets of financial intermediaries. This made them the second major financial intermediary group after banks, which preceded insurance companies and pension and investment funds. However, in contrast with other non-banking financial intermediaries, whose activities are precisely regulated by special legislation, the activities of leasing companies have only recently become subject to regulation.

Because of this, there is a lack of precise statistical data to provide a full insight into the operations of the entrepreneurs engaged in this activity. According to Fina data, 80 entrepreneurs were either registered for the activity 6521 – Financial leasing, or had the word "*leasing*" in their names at the end of 2005, which means that central bank statistics cover less than a half of the total number of entrepreneurs engaged in leasing operations in the RC. Given the absence of an official register of leasing companies, the fact that makes CNB statistics useful for the analysis of the Croatian financial intermediary sector is that the 36 leasing companies covered account for 95% of the total assets of the said 80 entrepreneurs (Figure 1).

Figure 1 Number and Assets of Entrepreneurs Engaged in Leasing in the RC



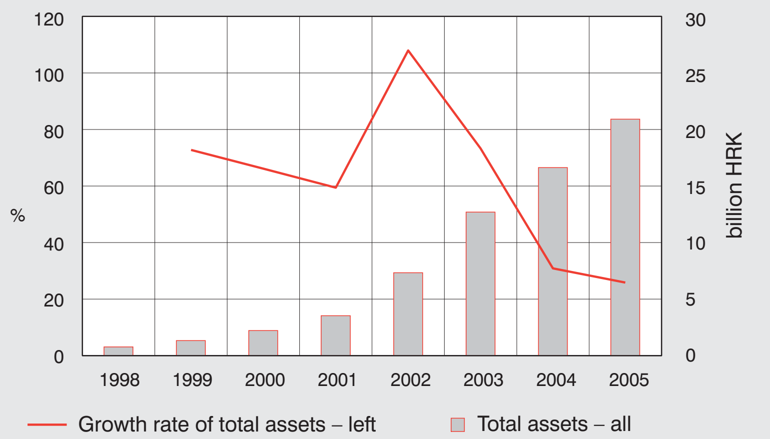
Sources: Fina and CNB.

In addition to the incomplete coverage, CNB statistics also employ the time series of data starting as late as from the second quarter 2003, which makes them insufficient for an analysis of leasing operations in the period when this activity peaked. As shown by Fina data, leasing in the RC started getting into full swing in 2002

(Figure 2) pending the tightening of CNB measures to slow down credit growth. In order to avoid control and restrictions of credit growth, and to make required financing sources cheaper, banks rechannelled a great deal of activities related to the acquisition of tangible assets (real estate, vehicles and equipment) to special leasing companies with which they had direct or indirect ownership links.

The assertion that the separation of leasing activity from banks was planned is confirmed by reference to the Banking Act now in force, which contains a provision allowing banks to provide financial leasing services that banks have not exploited. The interaction of an increasingly tighter monetary policy and continuing strong credit growth resulted in leasing companies assets' growth rates exceeding 50% in the period from 1999 to 2003, and all that while leasing was in an underdeveloped stage. However, indications are that leasing services reached a mature phase of development, with more modest growth rates of leasing companies' aggregate assets in 2004 and 2005, as well as in 2006 according to preliminary CNB data.

Figure 2 Assets of Entrepreneurs Engaged in Leasing in the RC



Source: Fina.

9 Capital Market

In the first half of 2006, the Croatian capital market was marked by the initial phase of the sale of Pliva d.d. The process began in March 2006 with a non-binding takeover bid made by Actavis Group hf, a global pharmaceutical company based in Island, and continued in June, when an interest in acquiring Pliva was expressed by its present owner, Barr Pharmaceuticals, Inc, an American pharmaceutical holding, or more precisely by its European subsidiary Barr Laboratories Europe B.V. These developments were reflected in a considerable increase in the equity market trading volume and number of transactions, as well as in record high stock exchange indices. Positive trends were also recorded on the debt securities market, with the issues of government and corporate kuna bonds and the revival of the commercial paper market, increasingly used by enterprises to raise short-term funds. The overall capital market was positively influenced by the continued sharp increase in the assets of institutional investors, especially investment and pension funds, which play a major role in generating demand for all kinds of securities.

As can be seen from the dates of its decisions, the regulatory body issued approval for four public share offerings, of which three equity subscriptions worth a total of HRK 221.5m were completed in the first half of 2006. Also issued in this period were three corporate bonds valued at over HRK 1.7bn. Despite these improvements, the capital market still plays a minor role in financing the economy and, as there is considerable room for its development, expectations are that the number of public offerings of both equities and bonds will rise. In this context, encouraged by the sale of Pliva d.d. and looking for new quality domestic shares, market participants have focused on some leading domestic enterprises that are not yet listed on the stock exchange.

Table 6 Public Offering of Equities and Corporate Bonds[a], in million HRK

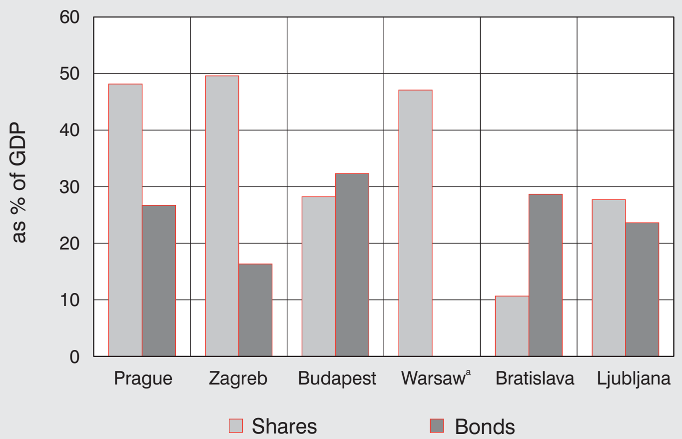
	Equities		Corporate bonds	
Year	Number of issues	Total value of issues	Number of issues[a]	Total value of issues[a]
2001	1	13.0	–	–
2002	1	11.8	2	215.8
2003	1	1.2	1	150.0
2004	2	11.0	4	2637.5
2005	4	231.0	2	180.7
1-6/2006	0	0	3	1725.0

[a] Exclusive of corporate bonds backed by government guarantees.
Public offerings are recorded according to the date of HANFA's decision (former Crosec).
Source: HANFA.

17 The overall ZSE market capitalisation is calculated including the total market capitalisation of shares traded regularly in the previous three months, half of the market capitalisation of shares not traded in the previous month and a quarter of the market capitalisation of shares not traded in the previous three months.

Accounting for 49.6% of GDP at the end of the first half of 2006, market capitalisation[17] of shares on the ZSE increased by a considerable 11 percentage points over the end of 2005, more than on any other stock exchange observed. However, despite the increase in the first six months of 2006, prompted by the said developments, share liquidity was still among the lowest in the region. The average daily share turnover on the ZSE amounted to 11.4% of GDP at the end of June 2006, while accounting for 43.4%, 31.4% and 29.1% of GDP on the Prague, Warsaw and Budapest Stock Exchange respectively at the end of the same period.

Figure 28 Market Capitalisation at the End of the First Half of 2006



[a] Data for March 2006.

Sources: National stock exchanges.

The ZSE index rose by 35.8% by the end of June 2006 over the end of the previous year, recording the highest rise of all the observed stock exchange indices. In the same period, the Warsaw Stock Exchange index increased by 14.2%, the Ljubljana Stock Exchange index by 10.0% and the index of the Budapest Stock Exchange by 3.0%, while the index of the Bratislava and Prague Stock Exchange decreased by 8.7% and 5.6% respectively.

The dominance of government securities on the Croatian debt securities market was additionally ensured by the government's domestic borrowing policy. In line with

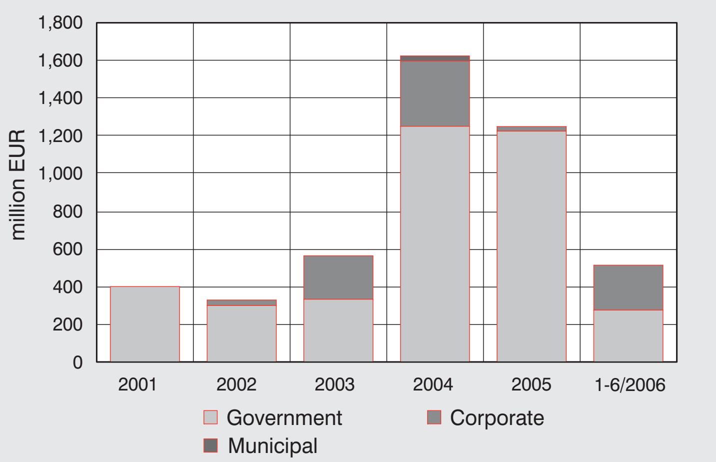
Table 7 Selected Stock Exchange Indices' Annual Yields, in %

	2002	2003	2004	2005	6/2006
Bratislava – SAX	15.9	26.9	83.9	26.5	–8.7
Budapest – BUX	0.9	30.3	57.2	41.0	3.0
Ljubljana – SBI20	55.2	17.7	24.9	–5.7	10.0
Prague – PX50	16.8	43.1	56.6	42.7	–5.6
Warsaw – WIG	3.2	44.9	27.9	33.7	14.2
Zagreb – CROBEX	13.3	1.1	32.1	27.6	35.8

Sources: National stock exchanges.

this, no government bonds were issued in foreign markets in the first half of 2006, while the second tranche of the ten-year bond from December 2005, issued in February, nominally worth HRK 2bn, increased the total value of the issue to HRK 5.5bn. As the first ten-year kuna bond, this bond played a major role in extending the kuna yield curve, which is important for aligning long-term interest rates in the RC with the fourth Maastricht criterion on the long-term interest rate level. The first six months of 2006 also saw the issue of three kuna corporate bonds worth HRK 1.725bn in nominal terms. There were 23 bond issues (9 government bonds, 1 CBRD bond, 2 municipal bonds and 11 corporate bonds) listed on the domestic market at the end of June 2006, i.e. three corporate bonds more than at the end of December 2005. The share of corporate bonds in the total bond turnover and market capitalisation on the domestic market was relatively small, ranging around 2% of GDP, while the share of market capitalisation of all ZSE bonds in GDP stood slightly above 16% at the end of June 2006, which was the smallest share compared with other major stock exchanges of comparable CE countries. However, the share of bond turnover in GDP was higher only on the Bratislava and Prague Stock Exchanges, which is an indication of great investor interest in domestic bonds. As the rising demand for bonds is closely related to the strong growth of institutional investor assets on the Croatian capital market, its further increase can be expected in the forthcoming medium-term.

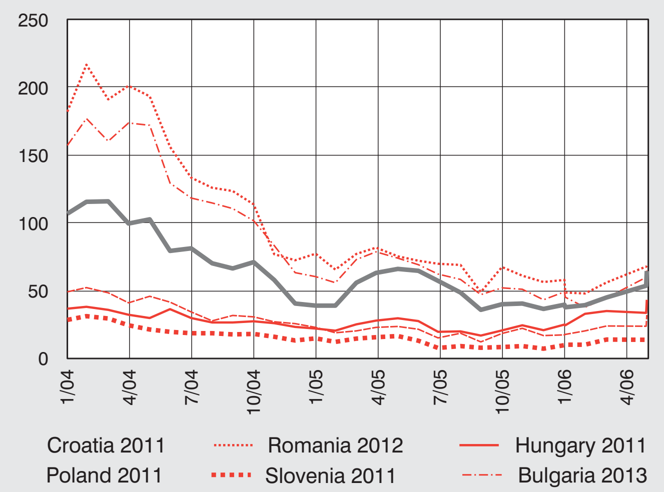
Figure 29 New Bonds Issued in the Domestic Market, over the period



Source: ZSE.

Due to the required yield on Croatian eurobonds growing at a higher rate than the yield on benchmark German bonds in the first half of 2006, their spread expanded. These trends were caused by the global interest rate increase and sharp economic upturn in Germany. The yield spread between Croatian eurobonds of all the observed maturities and the benchmark German bond widened from about 40 basis points in late 2005 to about 60 basis points at the end of the first half of 2006. The yield spread for the Croatian eurobond due in 2011 was 65 basis points at the end of June 2006. In relation to the comparable countries, Croatia thus preceded Romania and was equal to Bulgaria, so that the difference between the spreads for Croatia and the mentioned countries reduced. This could be ascribed to the growth of investor confidence in Romania and Bulgaria generated by their improved position in the EU accession process.

Figure 30 Yield Spread between Euro-Denominated Selected Countries' Bonds and the Benchmark German Bond



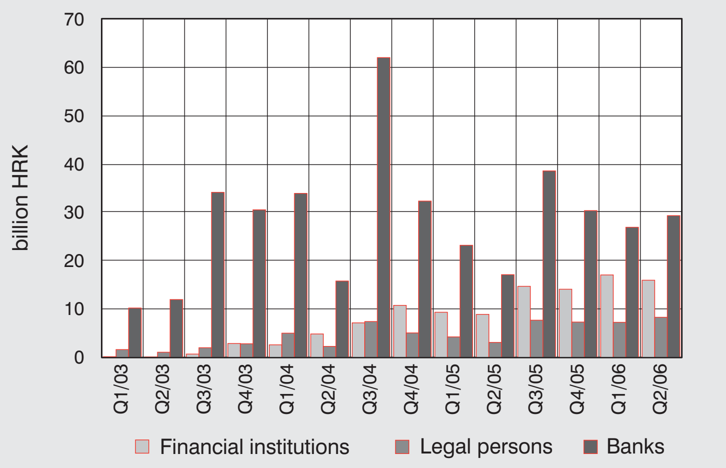
Source: Bloomberg.

Expectations are that the capital markets in Croatia and other transition countries will be influenced by the continued interest rate growth in developed financial markets in the second half of 2006, which could diminish investor interest in our region. However, the domestic equity securities market expects the continuation of the privatisation of Ina, whose shares are expected to replace Pliva shares on the market, so that share trading in the domestic market should remain dynamic in the forthcoming short-term period.

10 Money Market

The Croatian money market was marked by the continued good liquidity and relatively low interest rates in the first six months of 2006. These developments were also spurred by the central bank's January decision to lower the reserve requirement rate from 18% to 17%, and by its foreign exchange interventions, which were, inter alia, caused by uncommonly high foreign currency inflows for the recapitalisation of domestic banks. Despite a relatively high financial system liquidity, the average overnight turnover on the OTC was on average higher in the first half of 2006 than in 2005, whereas average CNB's reverse repo placements were lower. Banks remained the key participants on the Croatian money market, both on the ZMM and on the OTC, with the share of turnover in bank trading with non-banking financial institutions and non-financial corporations continuing to grow slightly. The volume of interbank trading on the OTC drifted only slightly lower and remained considerably higher than the volume of bank trading with other participants.

Figure 31 Overnight Turnover in Bank Trading on the OTC Money Market

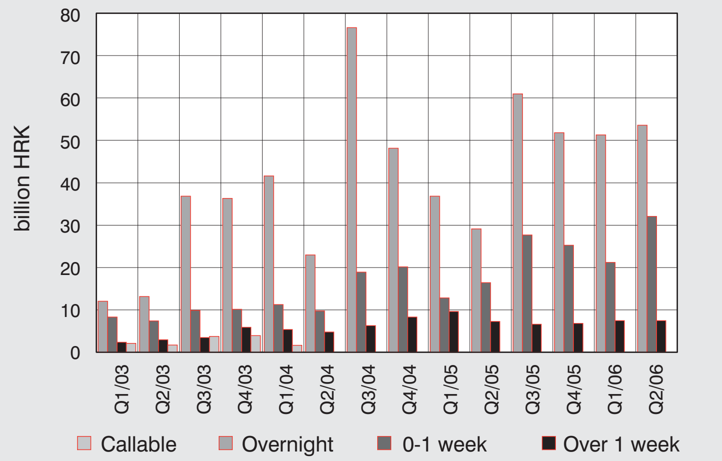


Source: CNB.

Although rising continuously in 2005 and in the first half of 2006, turnovers in repo operations with securities remained negligible within the overall money market, so that direct lending continued to dominate money trading on the domestic market. As usual, overnight loans prevailed in the maturity structure of direct loans, although, along with an increase in total money market turnover compared with the same period last year, their share in total loans dropped. This was in consequence of a relatively high liquidity of banks, which prompted the participants having excess funds to longer term lending on the money market, mostly involving loans maturing in up to one week. Money trading related to maturities exceeding one week in the first half of 2006 remained at almost the same level as in 2005, while callable loans are almost no longer traded on the ZMM.

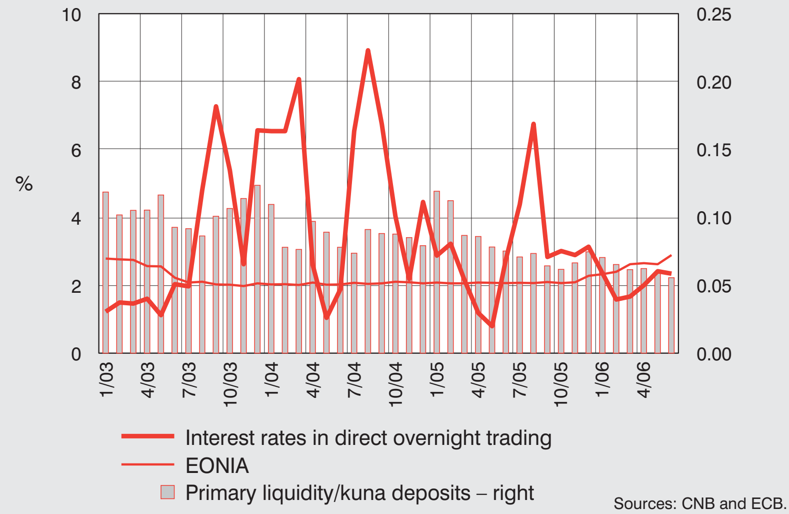
Following the launch of CNB's reverse repo auctions in April 2005 and the introduction of additional CNB's measures in November 2005, aimed at eliminating the negative effects of the reserve requirement allocation and maintenance on money market interest rate volatility, interest rates, as expected, stabilised in the first half of 2006. The average interest rate in overnight interbank trading was not much more volatile in that period than the benchmark overnight interest rate, EONIA (the overnight EURIBOR), which is an indication of an increasing importance of the CNB reverse repo auction interest rate as the benchmark short-term interest rate on the Croatian money market.

Figure 32 Money Market Turnover by Maturity



Source: CNB.

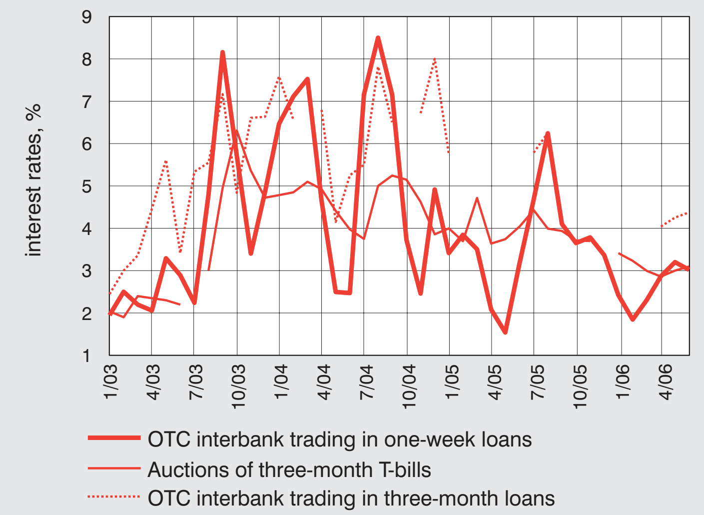
Figure 33 Overnight Interest Rates and Bank Liquidity



Sources: CNB and ECB.

As a consequence of high money market liquidity and the introduction of CNB's regular reverse repo auctions with MoF T-bills used as collateral, the stock of subscribed T-bills of all maturities increased in the first half of 2006, standing at HRK 12.04bn at the end of June. At the same time, great demand for these risk-free securities, the most liquid on the domestic market, led to a substantial fall in their yields, which, in turn, provided the government with cheaper short-term financing. Benchmark short-term interest rates on MoF T-bills maturing in three months stabilised at about 3% with minor monthly oscillations, while three-month interbank loans were traded only intermittently and at interest rates exceeding those on MoF T-bills of the same maturities.

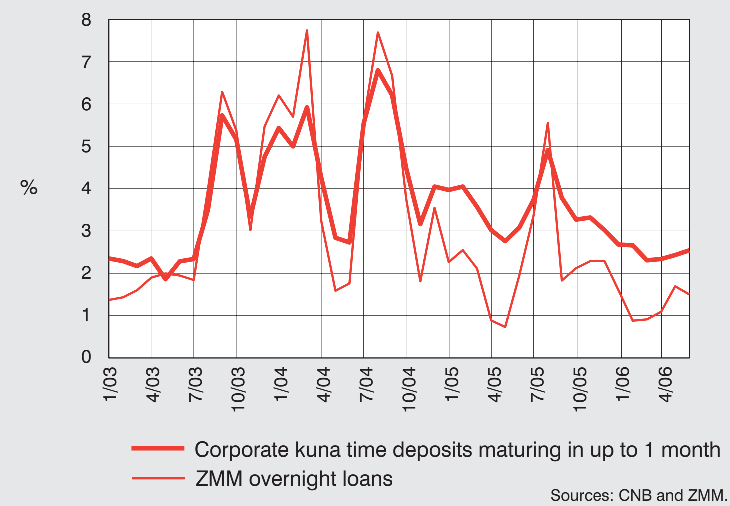
Figure 34 Risk Premium and Liquidity on the Money Market



Sources: CNB and MoF.

Backed by good money market liquidity, banks' lending rates on short-term loans continued to trend downwards in the first half of 2006. In contrast, interest rates on short-term foreign currency time deposits continued their mild rising trend, due to the fact that these deposits remained a cheaper financing source for banks than foreign borrowing, made increasingly more expensive by restrictive monetary policy measures. Interest rates on kuna time deposits, especially those on corporate deposits, continued to follow money market interest rate trends.

Figure 35 Interest Rates on Overnight Loans and Short-Term Corporate Deposits

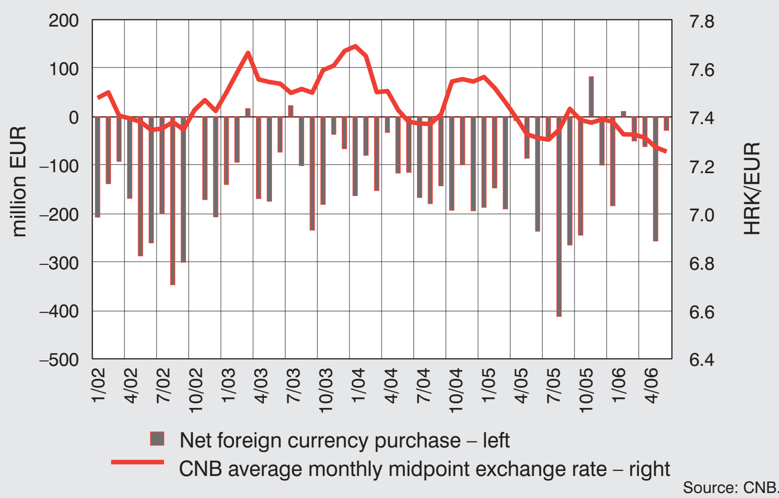


Sources: CNB and ZMM.

11 Foreign Exchange Market

Pressures on the appreciation of the kuna exchange rate against the euro, present throughout 2005, continued in the first half of 2006. This was due to an increased foreign exchange supply caused by continued foreign borrowing of banks and several bank recapitalisations with funds from abroad, but also to a rise in the number of issued securities and strengthened investor interest in such type of investment. In addition, the kuna also strengthened because of Croatian capital market developments related to the Pliva d.d. takeover. In an effort to alleviate these appreciation pressures, the Croatian National Bank held seven foreign exchange auctions, purchasing from banks EUR 582.8m, EUR 12m more than in the whole 2005.

Figure 36 Banks' Net Foreign Currency Purchase and the CNB Midpoint Exchange Rate

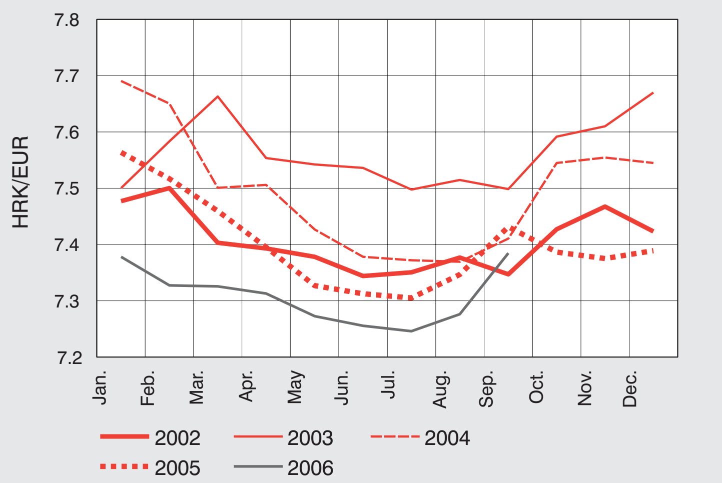


Source: CNB.

Despite upward pressures on the domestic currency, the nominal exchange rate of the kuna against the euro did not fluctuate to a large degree in the first half of 2006, in part undoubtedly due to the favourable macroeconomic environment. The midpoint kuna/euro exchange rate moved within a narrower range than usual, between HRK 7.25/EUR and HRK 7.38/EUR, while the average kuna/euro exchange rate variability was relatively low at 0.07%. The range between the highest and the lowest recorded midpoint exchange rate was narrower than in the whole of 2005, when the midpoint exchange rate of the kuna against the euro ranged between HRK 7.29/EUR to HRK 7.66/EUR, while the average exchange rate variability was 0.11%. These movements show a continuation of the nominal strengthening of the kuna against the euro, started already in late 2003 if seasonal influences are disregarded.

Transaction volume on the Croatian foreign exchange market continued to increase

Figure 37 Seasonality of the Average Monthly CNB Midpoint Exchange Rate

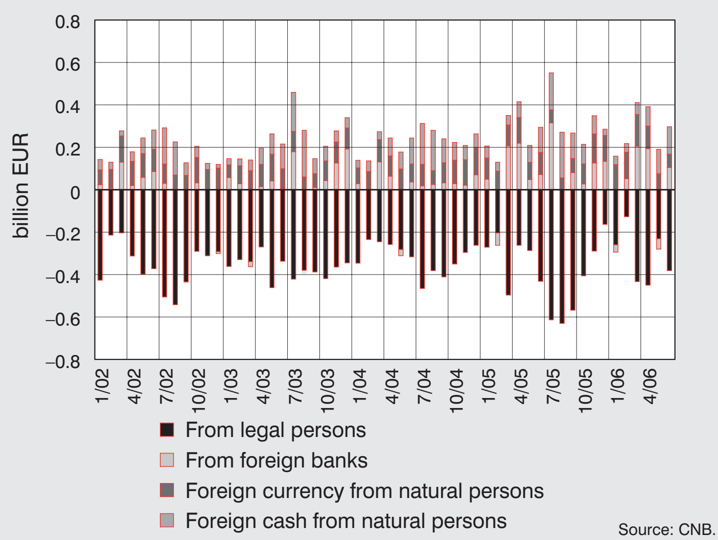


Source: CNB.

in the first half of 2006. The average monthly turnover in bank intermediated spot foreign currency trading rose to EUR 5.0bn in the first half of 2006, while standing slightly below EUR 4.3bn in 2005. As usual, the major net purchasers of foreign exchange were legal persons, while natural persons and foreign banks participated as net sellers. Due to the appreciation pressures on the domestic currency prevailing in the first half of 2006, the central bank was a purchaser of foreign exchange. The share of total goods and services exports in total spot transactions dropped from 33.6% in 2005 to 30.5% in the first half of 2006, indicating a rise in foreign demand for kuna in that period.

While the Croatian foreign exchange market continues to be dominated by spot

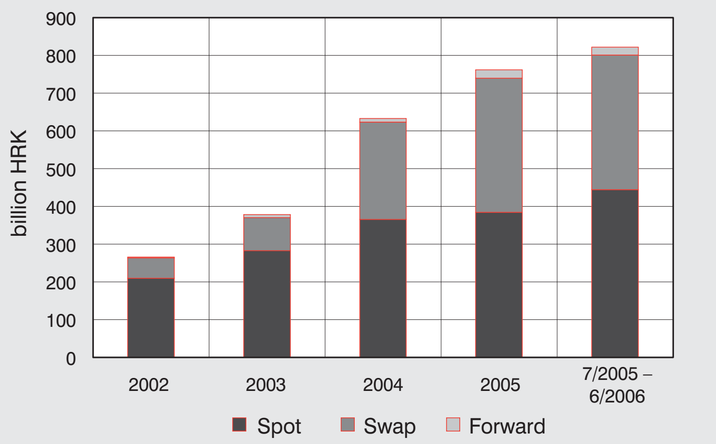
Figure 38 Monthly Spot Net Foreign Currency Purchase



Source: CNB.

transactions, foreign exchange swap transactions have gained in importance in the last few years, with the share in total foreign exchange trading slightly exceeding 20% in 2002 and 2003, increasing more considerably to 41% in 2004 and standing above 43% in the first half of 2006. One of the reasons for the turnover increase in foreign exchange swap transactions could be growing foreign investor interest in kuna securities on the domestic capital market, whose purchase is often financed by such instruments. In contrast with foreign exchange swaps, trading in foreign exchange forward contracts (forward transactions) is still underdeveloped, partly due to the kuna exchange rate remaining stable over several years. The share of these transactions in total foreign exchange trading has constantly held below 3%, although there are indications that this market segment could develop more strongly in the future with banks responding to central bank measures, i.e. as a substitute for foreign currency indexation clauses sanctioned by CNB measures from the third quarter 2006.

Figure 39 Foreign Currency Turnover by Transaction Type

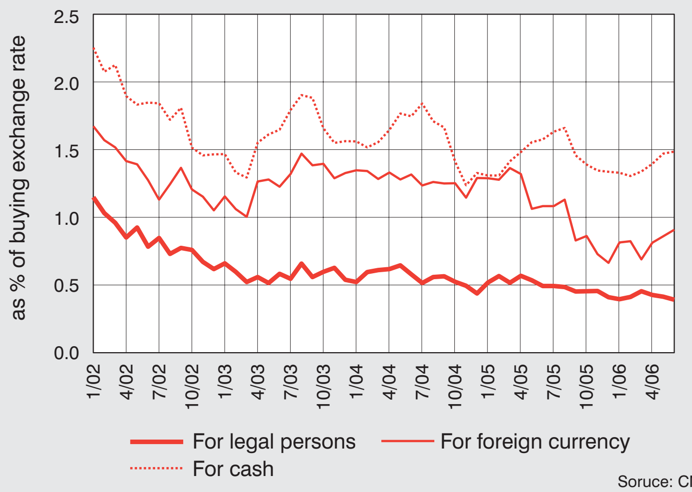


Source: CNB.

Having dropped considerably in 2002, due to increase in the foreign exchange market turnover, spreads in foreign exchange trading were relatively stable, especially in the economically most important segment – trading with legal persons. The spread between the selling and buying exchange rate in trading with legal persons drifted slightly lower in the first six months of 2006 to about 0.4% of the lower, buying rate, while the spread in foreign currency trading with natural persons remained at the level from the end of 2005 of about 0.8%. Given the fact that seasonal oscillations in foreign cash trading are uncommon in the first half of the year, spreads in that trading segment remained stable in the first half of 2006 at about 1.4%. These are all indications of stable liquidity conditions on the Croatian foreign exchange market in the first half of 2006.

The index of exchange market pressure, which shows the relation between changes in central bank international reserves and exchange rate trends, remained moving below the critical level that could indicate difficulties in international payments or

Figure 40 Difference between the Average Monthly Selling and Buying Exchange Rates



Soruce: CNB.

speculative pressures on the foreign exchange market. Expectations are that the growth trend in the total turnover in foreign currency trading could positively affect foreign exchange market liquidity and stimulate the development of the still underdeveloped segment of forward trading, although larger oscillations in the exchange rate would be even more beneficial to its development.

12 Institutional Framework

The majority of changes in the institutional framework of the Croatian financial market in the past year were related to the harmonisation of Croatia's financial system legislation with the EU acquis communautaire. While a great progress has been made in this area, about ten new acts still have to be passed in the following two to three years.

The amendments to the Act on Housing Savings and Government Incentive to Housing Savings were adopted late in July 2005, reducing the government incentive, but enabling the so-called inter-financing, that is, direct granting of housing savings loans. In addition, the amendments to the Foreign Exchange Act were adopted in November 2005, regulating the operations of authorised currency exchange offices. The new Investment Funds Act, adopted in late 2005 and applied as of the beginning of 2006, is the first to regulate the establishment and operation of the so-called private equity funds and venture capital funds. The new Insurance Act, enacted at about the same time, regulates in detail the operation of insurance companies. The new Accounting Act and the new Audit Act, that differ from their earlier versions primarily by a series of technical changes necessary to harmonise these two acts with accounting and auditing practices in the EU. However, the most important change in the institutional framework of the Croatian financial market last year was definitely the establishment of the Croatian Financial Services Supervisory Agency (HANFA), which integrated the former Croatian Securities Commission, Agency for Supervision of Pension Funds and Insurance and Directorate for the Supervision of Insurance Companies. The Act on the Croatian Financial Services Supervisory Agency was enacted in late November 2005, and it has been applied since early 2006.

As regards further regulation of the Croatian financial market, the amendments are being drafted for the Securities Market Act, which are planned to be enacted in an emergency procedure late in the year. However, this is only a temporary solution to eliminate some deficiencies in the present act, while full harmonisation with EU directives is to be achieved by adopting a new act, which is planned for the first quarter of 2008. The final version of the amendments includes provisions contributing to market liquidity, e.g. the ones providing for the definition of financial derivatives, with a framework for trading in financial derivatives in a separate stock exchange listing, and the introduction of a special kind of stock exchange trading, the so-called market-making, aimed at improving price stability. The new act will also introduce more profound changes necessary for the further development of the Croatian capital market, including the fundamental guidelines for the financial instrument market with accompanying implementation measures (*the Markets in Financial Instruments Directive*), which are to be adopted by the EU as well late in 2007. The innovations in this act will mostly refer to improved investor protection and transparency, while it will also more clearly define penalties for illicit practices of market participants. In addition, the new act is to provide a more precise definition of the supervisory function of the HANFA, and it will include harsher penalties for the use of price-sensitive insider information on client orders and own account trading by certified companies. The issue of the listing of joint stock companies (JDD) should also be resolved prior to the enactment of the new act. This is because the listing of joint stock companies on the Croatian financial market is a legal requirement, which is not recognised as such in stock exchange listings in the EU.

The draft of an act on securitisation, that is the conversion of claims or illiquid assets into securities, should be completed by the end of the year so that it could be submitted to parliamentary procedure in the first quarter of 2007. In addition to its content, the innovation related to this act is in its preparation, which is consistent with EU methodology involving the public private dialogue. Accordingly, participating in drafting this act are the representatives of the MoF, HANFA, CNB and the German Development Bank, KfW. Its enactment will enable economic subjects to replace part of their illiquid assets by liquid funds through securities issuance. After it is adopted in Croatia, this act could finally create the conditions for supplying genuine mortgage loans. However, the first priority is to find the legal grounds for debtors' consent to have their debts transferred from the bank to another creditor, to select the type of securities adequate for such operations and define their tax treatment. In addition, prior to introducing securitisation, its possible effects on the Croatian economy should be analysed in detail. This primarily refers to external debt, as it would be increased by non-residents' purchase of securitised securities. On the other hand, after the securitisation act is adopted, banks will be able to rely more on the financing sources from the domestic capital market, so that the increase in external debt could be avoided. If implemented successfully, securitisation would definitely have a positive impact on the development of the Croatian capital market, although this development should be accompanied by the development of the supervisory mechanism for the new category of financial operations.

Despite announcements, a leasing act has not been passed yet, but it is in parliamentary procedure. The act proposal incorporates the CNB's position on forbidding leasing companies to grant loans (with the same characteristics as bank loans). This means that leasing companies will only be permitted to engage in leasing operations, and that they will be supervised by the HANFA. It has to be mentioned that the Banking Act now in force allows banks to provide financial leasing services, but that banks have failed to exploit this provision and, in order to avoid control and restriction of credit growth, opted instead for establishing separate leasing companies with which they had direct or indirect ownership links.

The amendments to the Pension Funds Act and the Croatian National Bank Act are expected to be adopted soon. The amendments to the Act on Mandatory and Voluntary Pension Funds will probably abolish the regulation on the minimum required number of mandatory and voluntary pension funds' members, liberalise transfer between funds and regulate the issue of guaranteed return for mandatory pension fund members. In addition, the possibilities for investing in certain asset types will probably be expanded and the possibility to invest in funds outside Croatia increased. The amended Croatian National Bank Act will change the composition of the CNB Council. While probably remaining unaltered until Croatia's accession to the EU, the Council will after that be comprised by the Governor and eight Vicegovernors. Another innovation is the proposal that the Governor submit the report to the Croatian Parliament twice a year instead of once a year.

After over three years of efforts to establish the Croatian Registry of Credit Obligations (HROK), the Registry is still in a testing stage. In order for the system to be as precise as possible when it starts operating, the twenty banks that founded the Registry decided to wait until the end of the year for extensive testing procedures to be completed. According to latest information, the Registry will become fully operational no sooner than in 2007. The Registry will in time transform into a "positive" registry, with a wide scope of data, and until then it will offer only the data on loans requested and loans granted, regularity of loan repayments, collateral instruments and other issues related to credit arrangements with banks. The issue of personal data protection will be resolved by a client providing a one-time written approval for data exchange through the Registry while submitting a loan application. The Banking Act now in force provides for issuing an approval for data exchange to an enterprise established by the banking association. The next step in creating the Registry is to include data on debtors to non-banking creditors, but the issue that still has to be resolved is the protection of their personal data. The loan applications submitted by an applicant who has not signed a written approval for the exchange of data through the Registry will not be immediately turned down, but it is to be expected that interest rates on these loans will be higher due to higher credit risk. In the meantime, until an adequate time series of data is accumulated in the Registry base, banks will continue to rely on the Data Exchange System (DES) operated by the Fina, containing only data on defaulting debtors.

The land registry and cadastral reform project has proceeded as planed, while the project leaders (the Ministry of Justice and the State Geodetic Directorate) have been running a campaign aimed at raising public awareness of the importance of checking real estate data in the land registry. The banking system derives great benefits from well-organised land records, as they enable the creation of an efficient mortgage system. With 80% of the data having been digitalised, land records can already be accessed through the Internet. The completion of the project will enable bank loan officers to verify the cadastre or land register data on the land and real estate owned by a loan applicant through the Internet and get a print out, which will considerably speed up the loan granting procedure.

In addition, other preparations are underway to harmonise the Croatian legislation with EU standards. Most importantly, the CNB has been drafting a very comprehensive credit institution act, which is to be harmonised with the EU acquis communautaire. Several other acts are also planned to be implemented: a payment system act, a financial collateral act, an act on the takeover of joint stock companies, an act on financial conglomerates and an act on mandatory and voluntary pension funds.

13 Banking Sector[18]

Having operated with a degree of caution in 2005 due to announced CNB measures, banks adopted a more aggressive approach in the first half of 2006, with the result that credit growth was 27% higher in that period than in the same period last year. This resulted in a marked improvement of operating results in the first half of 2006, including an increase in absolute net profit in the last 12 observed months and an improvement of relative profitability ratios. As the 17% growth in received deposits in the last 12 observed months was insufficient to sustain such credit growth, banks borrowings from financial institutions increased 41% annually in that period.

18 All the indicators were calculated based on banks' unconsolidated data. Semi-annual income and expenses were annualised by adding up the last four quarters. As regards the indicators having either the item "assets" or "equity" in the denominator, the average assets or equity in the past year was used: half of the amount at the beginning of the period and half at the end of the period. The data exclude banks in winding-up proceedings. Due to the said methodological specifics, some indicator values may differ from the values of similar indicators in other CNB publications.

The banking sector operation was in the first half of 2006 influenced by numerous regulatory changes, whose application had an effect on bank financial statements, beginning with those as of 30 June 2006. Specifically, the Croatian National Bank began enacting new regulations on the compilation and presentation of financial statements, as well as on monitoring and assessing risk exposure in the operations of banks and housing savings banks. This was due to the changes made in the International Financial Reporting Standards (IFRS), introduction of new prudential measures (related to currency induced credit risk), and a phased-in harmonisation of Croatian regulations with the corresponding regulations in the EU. Seven amendments to regulations on bank supervision and control and four amendments to monetary policy regulations were introduced in 2005 (applicable as of 30 June 2006).

There were 34 banks operating on the Croatian market at the end of June 2006, the same as in June 2005. The most numerous were small banks (24) and there were four medium-sized banks and six large banks.[19] [20] As regards the ownership structure, there were 20 domestic and 14 foreign-owned banks, with 90.7% of total bank assets controlled by the foreign-owned banks. In addition, it should be noted that all the large banks and three of the four medium-sized banks were foreign-owned and that the largest share of bank assets (about 44%) continued to be controlled by Italian shareholders.

Table 8 Main Data on Banks in the Republic of Croatia, in million HRK and %

						Year-on-year rate of change	
	31/12/2002	31/12/2003	31/12/2004	31/12/2005	30/6/2006	Amount	Percent
Number of banks	46	41	37	34	34	0	0
Total assets	174.139	204.043	229.305	260.278	277.766	42.191	18
Money assets, deposits, MoF T-bills and CNB bills	51.651	67.010	71.823	73.064	70.175	3.763	6
Securities portfolio	21.094	18.241	24.036	26.314	23.515	–164	–1
Loan portfolio	92.293	110.052	125.202	151.960	174.658	37.612	27
Other assets	9.102	8.740	8.244	8.940	9.419	980	12
Liabilities and capital	174.139	204.043	229.305	260.278	277.766	42.191	18
Short-term liabilities	52.893	57.174	59.642	70.860	71.853	8.380	13
Long-term liabilities	95.181	118.809	139.001	154.314	167.691	27.605	20
Subordinate and hybrid instruments and other liabilities	9.557	9.977	10.980	11.660	11.998	556	5
Capital	16.509	18.083	19.681	23.443	26.224	5.649	27

Source: CNB.

19 According to their shares in the total banking sector assets, banks are classified as small banks (with a share in total bank assets lower than 1%), medium-sized banks (with a share in total bank assets larger than 1% and smaller than 5%) and large banks (with a share in total bank assets exceeding 5%).

20 As at 1 July 2006, the number of banks on the Croatian financial market decreased to 33 due to the merger of Požeška banka d.d. and Podravska banka d.d.

Despite the efforts of medium-sized banks to increase their asset share in total bank assets, the assets and liabilities in the Croatian banking sector remained concentrated in the few largest banks. At the end of the first half of 2006, the two largest banks managed 42.0% of total assets, 41.7% of total loans and 43.1% of total deposits of banks. The next four largest banks managed 38.6% of total assets, 39.6% of total loans and 36.0% of total deposits. Additionally, due to the fact that the large banks manage 80.1%, and foreign banks 90.4% of total bank assets, trends in aggregate financial indicators for all banks are dominantly influenced by indicator trends for these two bank categories.[21]

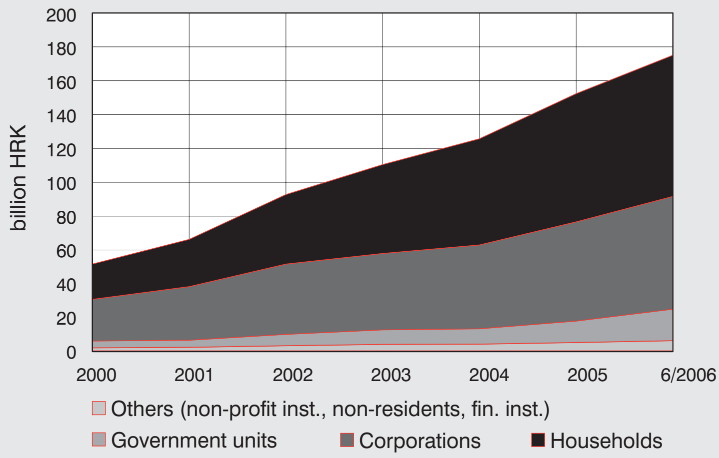
As regards balance sheet changes, total bank assets stood at HRK 277.8bn at the end of the first half of 2006, a rise of 6.7% over the end of December 2005, and of 17.9% over the end of June 2005. The highest annual rise was in loans granted to other clients and in loans to financial institutions, 15% and 17% respectively. Bank deposits with the CNB went up by a considerable 30.7%, mainly due to the increase in the allocated marginal reserve requirement In addition, the stock of MoF T-bills purchased by banks was 15% higher than in the same period a year ago. In contrast, deposits with banking institutions dropped by 39.6%, which could be attributed to the decrease in the percentage of minimum required foreign currency claims from 35% to 32%. A slight drop in securities (0.7%) was caused by a reduction in securities held for trading and securities held to maturity. The highest rise on the liabilities side was in liabilities on loans from financial institutions (40.9%) and deposits (16.8%). Time deposits rose the most of all the deposits. In addition, bank capital increased by a sharp 27.5% in the last year observed. The unusually high increase resulted from a rise in share capital, accounting for 50.5% of total bank capital on 30 June 2006, primarily a consequence of bank recapitalisation through share issuance. The increase in the amount of capital of 7 banks (of which three were large banks) on the Croatian market was HRK 1.7bn in the first six months of 2006, and 2 more banks (one of them large) were infused HRK 1.1bn worth of capital in the next three months. There are several reasons why these banks were recapitalised. First of all, the marginal reserve requirement, which made external borrowing considerably more expensive, should not be related to recapitalisation. The requirement to evaluate and recognise currency induced credit risk as of 30 June 2006 led to an increase in total risk exposure, comprised by the denominator in calculating the capital adequacy ratio. This was the reason why banks had to increase their capital in order to be able to maintain the required capital adequacy ratio. In addition, some medium-sized and small banks decided on recapitalisation to expand operations and enlarge their market shares.

Household loans continued to prevail in the structure of Croatian bank loans,

21 It should be noted that Hrvatska poštanska banka increased its share in total bank assets from 2.8% at the end of 2005 to 3.6%, due to the payment of the first instalment of pensioners' debt. Specifically, the source of funds required for the purchase of accounts receivable from the associated enterprise HPB Invest, which was in charge of debt repayment, was a CNB repo loan (collateralised by MoF T-bills). The HRK 1.2bn generated in the bank's loan portfolio was recorded as an increase in loans to the government, and on the liabilities side as an increase in short-term loans received.

making up 47.8% of the total, despite a slight decrease from the end of 2005. The share of loans to corporations and financial institutions held steady, while the share of loans to government units expanded from 8.4% to 10.6%. At the end of June 2006, the share of loans in banks assets stood at 62.9%, which corresponds with the highest shares of loans in bank assets in the banking sectors of EU 25.

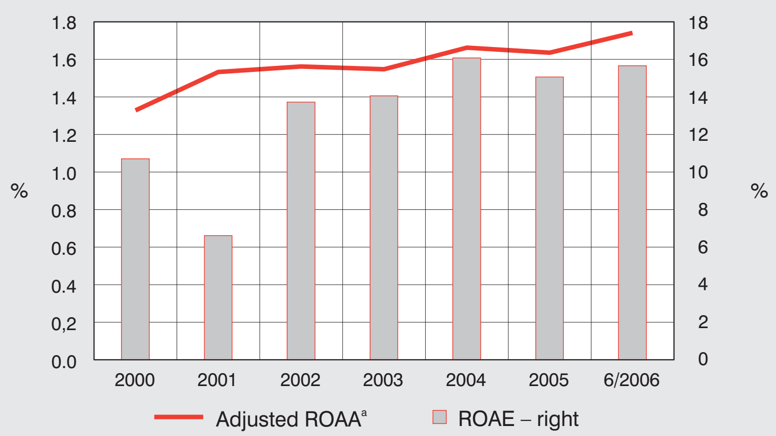
Figure 41 Bank Loan Portfolio by Debtor Sector



Source: CNB.

At the end of the first half of 2006, three banks reported losses, while all the remaining banks reported profit. Having deteriorated in 2005, relative profitability ratios of the Croatian banking sector slightly improved in the first half of 2006. The annual ROAA for Croatian banks was 1.76% at the end of the first half of 2006 (compared with 1.65% at the end of 2005), whereas the ROAE stood at 15.7%, in relation to 15.1% at the end of 2005.

Figure 42 Banks' Return on Average Assets and Average Equity

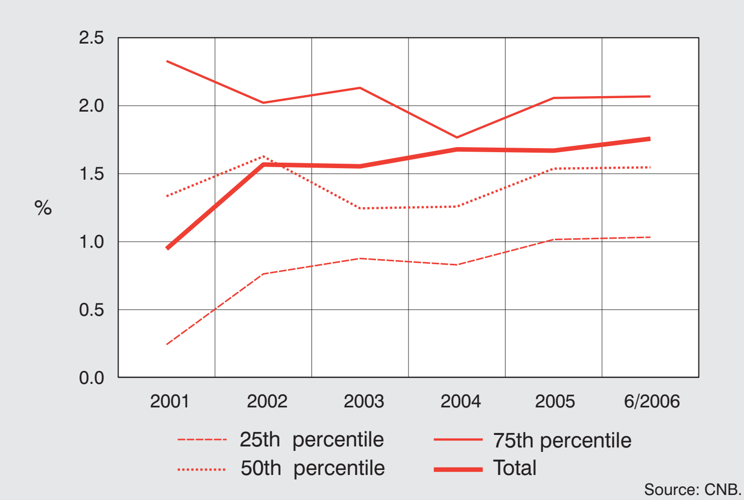


[a] The adjusted ROAA is pre-tax and pre-extraordinary items.

Source: CNB.

Due to the market consolidation process, trends in financial results of the large banks at bank group level are very similar to those of the foreign banks. In addition, large banks traditionally have more stable profitability ratios, with the ROAA standing below the ROAA for all banks and the ROAE for this bank group exceeding this ratio for all banks. This is because large banks traditionally have relatively higher assets and smaller capital than other banks.

Figure 43 ROAA by Banks, end of period

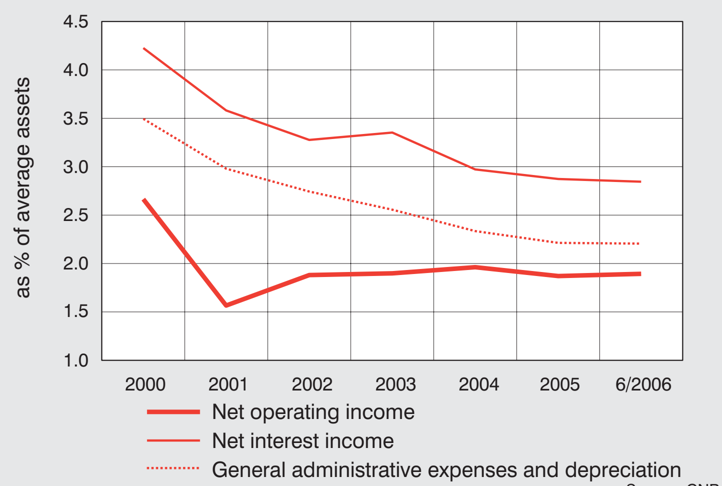


Source: CNB.

The good business performance of the Croatian banking sector in the last 12 months was mostly due to the two largest banks reporting a sharp increase in profit compared with the end of June 2005 (72.7% and 22.1% respectively). The 12.9% increase in annualised net profit of all banks over 2005 was mainly in consequence of net non-interest income growing by 8.1%. This growth was primarily a result of the 78.9% decrease in the loss generated by the translation of balance sheet items indexed to foreign currency to the agreed exchange rate, which was exactly the item causing a decline in financial indicators for 2005. At the same time, net interest income of all banks increased only by 4.2%. As the same increase was registered in general administrative expenses and depreciation, their ratio to net interest income dropped from 54.4% to 53.8%. Expenses on loss provisions decreased by 31.9% from 2005.

Relative values of interest income from loans and interest expense on deposits mostly remained stable in the last 12 observed months. The ratio of interest expense on deposits to average deposits slightly increased (from 2.5% at the end of 2005 to 2.6% at the end of June 2006), while the ratio of interest income from loans to average loans reduced from 7.7% to 7.3% in the same period. In consequence, the ratio of interest rate spread to average assets held steady at 2.7% at the end of June, the value from the end of 2004 and 2005. This is also an indication that the favourable business per-

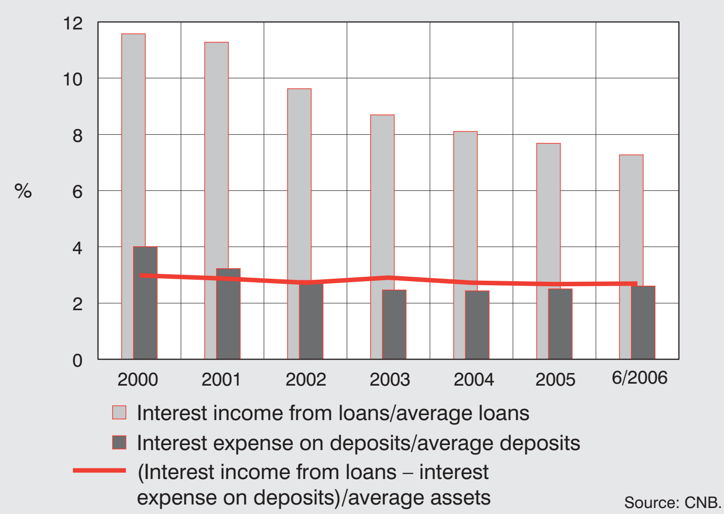
Figure 44 Profitability of Banks' Assets



Source: CNB.

formance of Croatian banks in the past year was due to the increase in non-interest income and a sharp drop in expenses on loss provisions.

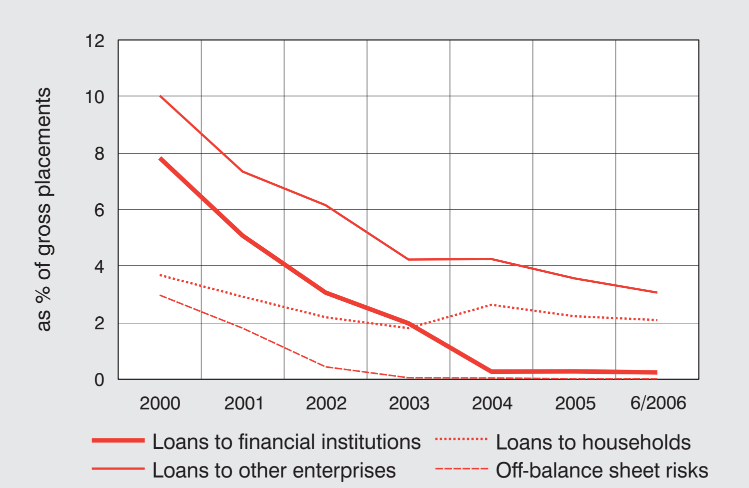
Figure 45 Interest Income from Loans and Interest Expense on Deposits



Source: CNB.

Credit risk remains the major risk in the Croatian banking sector, as is understandable considering the traditional dominance of deposit and loan operations in the overall operations of domestic banks. Expenses on credit risk provisions declined in the last 12 months, with the share of impairment loss and specific provisions for identified losses in total placements and related contingent liabilities down from 2.6% at the end of June 2005 to 2.0% at the end of June 2006. The decline in credit risk in the last year observed was to the largest extent due to banks' improved ratings on their loans to other enterprises (excluding public enterprises) and households, as well as on loans to non-residents. The change in the placement structure in relation to the end of 2005 is more important than their growth of 12.3%. Specifically, over 50% of the growth in gross placements was generated by the reallocation of debt securities and other available-for-sale assets from the item non-allocated assets to the item assets that are allocated into risk groups, in accordance with IAS 39. Debt securities and other available-for-sale assets rose by a sharp 20.7% in the first six months of 2006, almost completely due to MoF T-bills and RC bonds.

Figure 46 Impairment Loss (Specific Provisions), end of period



Source: CNB.

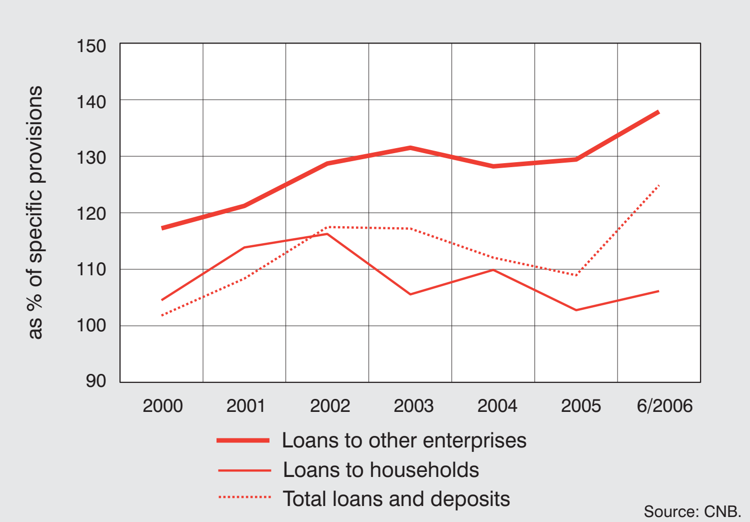
The reported quality of bank placements considerably improved in the first half of 2006. The share of best quality placements at the end of June was 96.4% (an increase over 96.0% at the end of 2005). In addition, the credit risk stress test for the banking system, conducted for internal purposes by the central bank, shows that the Croatian banking sector is capable of absorbing considerable losses in case of a negative shock in the macroeconomic environment. This analysis also suggests a relatively higher resistance to the deterioration of general credit risk in the group of small banks. However, a yet unpublished IMF analysis[22] shows that banks should make an effort to build up capital reserves during good times in order to get better prepared for the slowdown period.

Notwithstanding the decrease in recognised credit risk, it should be pointed out that bankers tend to underestimate credit risk of their long-term placements during long periods of economic growth. This is why credit risk assessment should also include

22 Consultations with the Republic of Croatia under Article IV of the IMF's Articles of Agreement, 2006 and Selected Issues – Bank Stability and Credit Risk in Croatian Banks.

overdue claims, which have increased by 14.6% by the end of June from the end of 2005 due to a sharp growth in overdue claims on loans, especially in loans to the government, strongly affecting the aggregate indicator of overdue claims on total loans and deposits.

Figure 47 Banks' Overdue Claims on Loans and Deposits, end of period



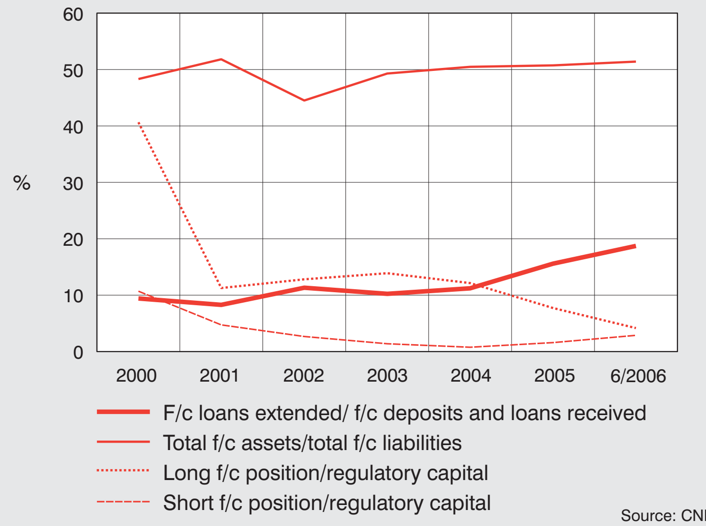
Save from the risks traditionally involved in banking operations, currency risk is also constantly present in Croatia due to a high degree of euroisation. A CNB decision limits banks' direct currency exposure by putting a ceiling on the total open foreign exchange position of banks at 20% of their regulatory capital. At the end of June 2006, the ratio of banks' aggregate short positions to the sum of their regulatory capitals was 2.9%, a marked increase over 1.6% at the end of 2005. The ratio involving banks' long positions was 4.2% at the end of 2006, which is a substantial decrease compared with 7.7% at the end of 2005.[23] Direct currency risk, as corroborated by the results of the banking system stress test, does not pose a threat to the stability of the Croatian banking sector, with the result that the influence of exchange rate changes on capital adequacy is almost neutral.

The banking sector stability is much more threatened by currency induced credit risk, that is, indirect currency risk, due to a large share of foreign currency indexed loans in total loans. In this connection, it is relevant to stress that at the end of June 2006 26.6% of total bank assets was denominated in foreign currency and 41.4% indexed to foreign currency. In addition, a lion's share of bank liabilities (50.7%) was foreign currency denominated, and 14.6% indexed to foreign currency. While this risk used to be hard to measure due to a lack of required data, the Croatian National Bank, having recognised its significance for the banking sector, enacted regulations,

23 As of April 2003, the prescribed calculation of a banks' open foreign exchange position also includes the equivalent values of open foreign exchange positions in classic and embedded options.

applicable as of 30 June 2006, requiring banks to ascertain, measure, monitor and control their exposure to currency induced credit risk. To facilitate this, banks have to monitor their clients' currency risk exposure. Having regard for the complexity of this procedure, the Croatian National Bank issued guidelines for banks to adjust accordingly their by-laws. While it is too soon to analyse the first data on banks' exposure to currency induced credit risk, they do suggest that this is inherent in placements to all sectors (except, of course, placements to non-residents). By types of placements, this especially concerns household loans.

Figure 48 Main Indicators of Banking Sector Exposure to Currency Risk, end of period

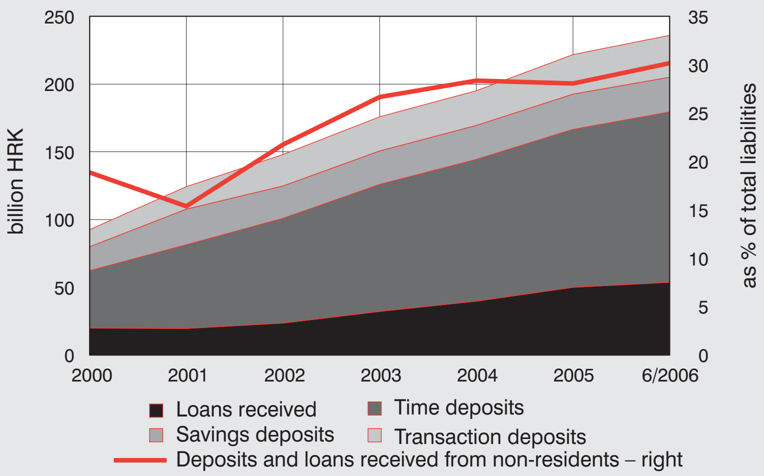


Source: CNB.

Another important change introduced into bank reporting is risk monitoring of derivatives embedded in placements, by clients, placements types and sectors, which are included in risk assessment in addition to the basic contract. The first available data indicate that the share of derivatives in total placements has stood at just 0.002%. In addition, as of June 2006, banks are required to make a more detailed assessment of quality loan collateral. According to the first estimates, only loans to non-residents are secured by quality collateral. While companies prefer business real property, banks tend to opt for residential real property as quality collateral for household loans. Government and financial institutions prefer other quality collateral instruments, including securities and unconditional guarantees.

Risks inherent to international operations are still impossible to quantify since all the needed data are not collected. "Classic" credit risk related to these operations is practically negligible due to the share of loans to non-residents in total loans of domestic banks standing below 0.6% since 2000. However, the share of foreign securities in the total value of actively traded securities' portfolios of domestic banks more than doubled in 2004 (due to a rise in investments in foreign debt securities) and grew further since then, standing at 41.7% at the end of June 2006. Still, financing risk is a far greater threat to banks' international operations, given the fact that the share of loans received from non-residents in total liabilities on loans received has held at over 70%.

Figure 49 Banks' Liabilities by Instruments, end of period

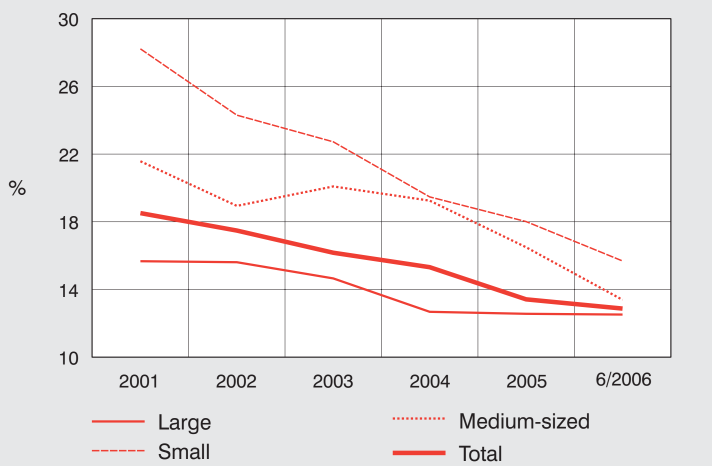


Source: CNB.

Banks' aggregate capital adequacy ratio continued a several year decline in the first half of 2006, hitting a historical low of 12.9% at the end of June 2006. Large banks, traditionally having lower capital adequacy ratios than smaller banks, had the greatest impact on trends in the aggregate capital adequacy ratio.

While the continued decrease in the aggregate capital adequacy ratio in the last few years could be attributed to a declining perceived risk of contingent losses from bank operations, its decrease in the first half of 2006 was primarily due to regulatory

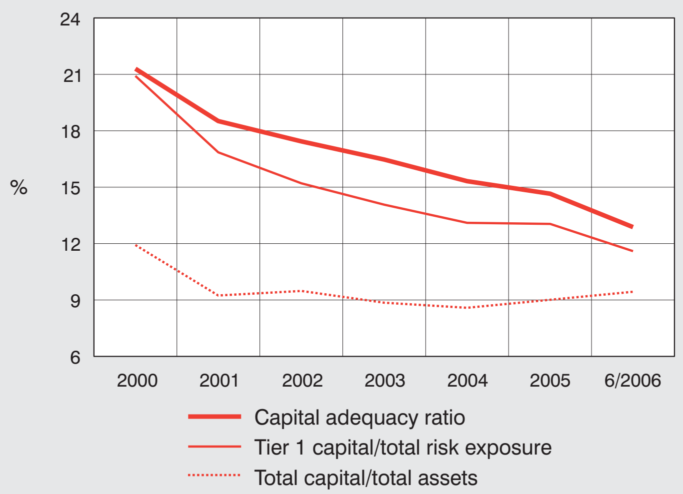
Figure 50 Capital Adequacy Ratios by Bank Peer Groups



Source: CNB.

changes. Specifically, the continuous increase in banks' regulatory capital (24.4% from the end of 2005) was insufficient to offset a sharp rise in total risk exposure, up 24.4% from the end of 2005. Accelerating this trend was the Decision on Amendments to the Decision on the Capital Adequacy of Banks, with the first financial reports compiled pursuant to this Decision as of 30 June 2006, which raises the weights on foreign currency and foreign currency indexed loans of clients with unmatched foreign exchange positions by 25 percentage points (the 50% weight to 75% and the 100% weight to 125%). As a result, asset items that used to be weighted by 50% in the calculation of risk-weighted assets were at the end of June 2006 almost completely weighted by 75%. This could be attributed to the fact that almost all foreign currency indexed loans, fully secured by mortgages on residential property, were extended to clients with unhedged foreign exchange positions. Banks attempted to compensate the rise in risk-weighted assets by increasing regulatory capital through recapitalisation.

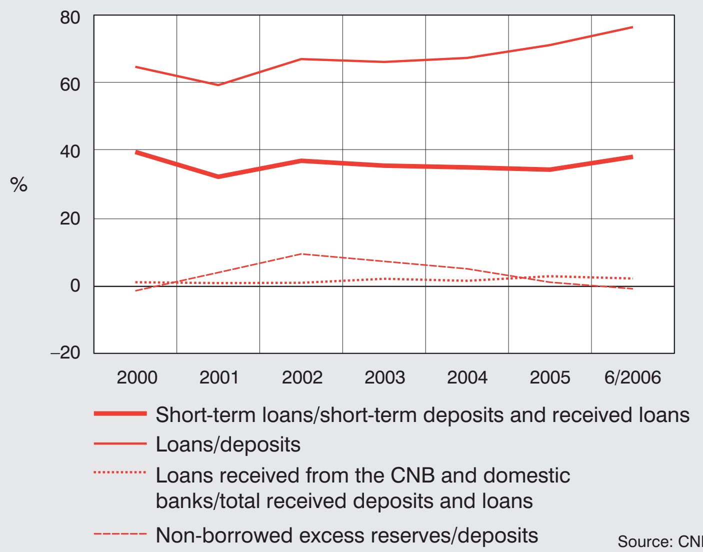
Figure 51 Leverage



Source: CNB.

Bank liquidity was satisfactory in the past 12 months. Bank participation in central bank's reverse repo auctions, started at mid-2005, intensified following the start of the tourist season when demand for kuna strengthened. The good banking sector liquidity was in the first half of 2006 further improved by CNB's foreign exchange interventions and turnover growth in regular reverse repo auctions. The drop in the relative share of loans received from the CNB and domestic banks in total received deposits and loans in the last six months also suggests a liquidity rise. On the other hand, standard bank liquidity indicators (the loan to deposit ratio and the ratio of short-term loans to short-term deposits) have grown in the last six months, suggesting a drop in bank liquidity, while kuna liquidity measured by the synthetic indicator of surplus kuna liquidity of the banking sector declined from 1.1% at the end of 2005 to –0.9% in June 2006. While bank liquidity is mostly good, the banking system stress test indicates a gradually reducing banks' resistance to one-off deposit outflows.

Figure 52 Main Indicators of Banking Sector Liquidity

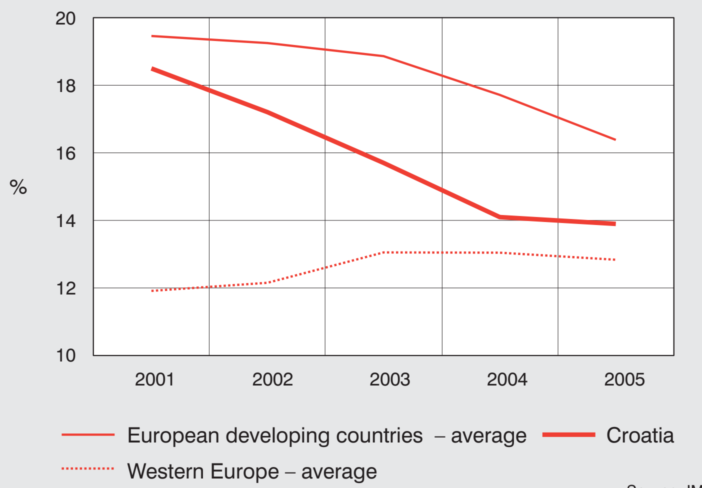


Source: CNB.

Solid profitability and capitalisation of the Croatian banking sector are also confirmed by international comparisons. According to IMF data, the capital adequacy ratio of the Croatian banking sector is one of the lower ratios in the group of European developing countries. While this indicator is sensitive to methodological changes in the short-term, its long-term trend suggest a decrease in perceived risk in Croatia. According to IMF's data for Europe, classified as Developing and Western Europe, Croatia's capital adequacy ratio positions it exactly between these two groups of countries.

As ROA and ROE are traditionally lower in more developed than in less developed banking sectors, it can be said that Croatia has come closer to developed countries in

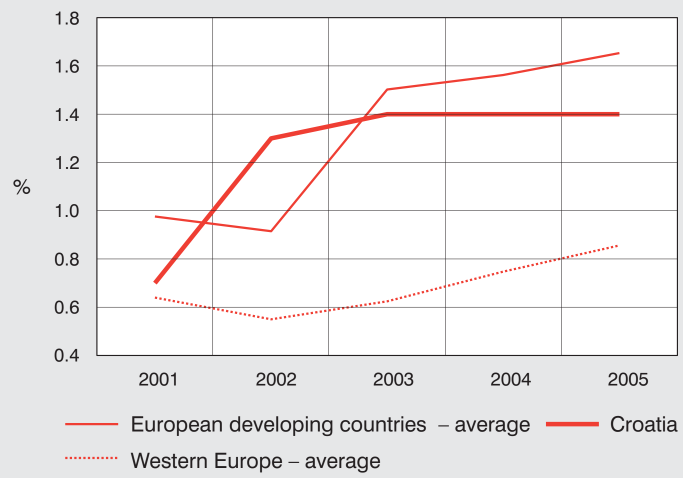
Figure 53 Capital Adequacy Ratio in Croatia and Selected Groups of European Countries



Source: IMF.

that respect, too. According to IMF data, European developing countries had a ROA of 1.6%, West European countries of 0.9%, while the same ratio for Croatia stood at 1.4% in 2005. These trends could be ascribed to the fact that less developed markets are characterised by lower competition and higher interest rates, but also by higher risk inherent in banking operations.

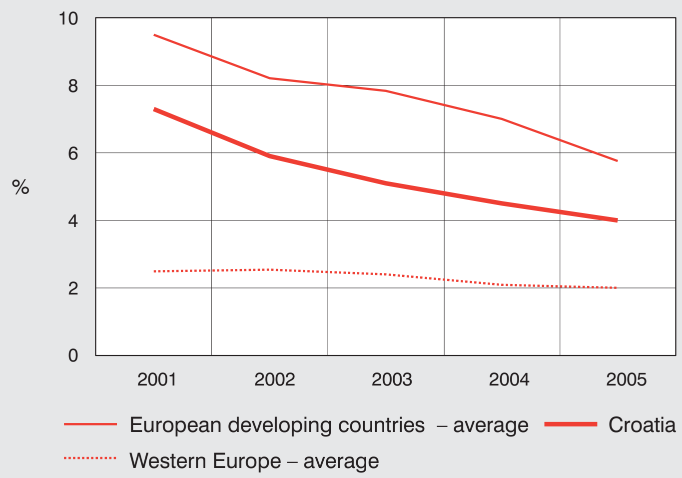
Figure 54 Return on Banking Sector Assets in Croatia and Selected Groups of European Countries



Source: IMF.

Considering that risk inherent in banking operations is higher on developing markets, it is understandable that required profitability ratios sought by owners to access these markets are also higher. The ratio of bad loans to total loans also shows that based on risk in banking operations Croatia can be placed between West European and developing European countries.

Figure 55 Share of Non-Performing Loans in Total Loans in Croatia and Selected Groups of European Countries



Source: IMF.

Overall, the Croatian banking sector performed well in the past year. This was achieved under the conditions where competition prevented lending interest rates increases, while deposit interest rates were spurred by the price of external borrowing. Also, in effect were monetary policy measures aimed at curbing credit growth and external borrowing of banks. Banks' response was to increase non-interest income, cut operating expenses and expand credit growth, which eventually resulted in a profitability rise in the first half of 2006.

Table A Selected Indicators of Banking Sector Operations[24] (in %, unless otherwise noted)

Indicator	2001	2002	2003	2004	2005	6/2006
Number of banks	43	46	41	37	34	34
Assets (in million HRK)	148,455	174,139	204,043	229,305	260,594	277,766
Return on average assets (ROAA)[a]	0.9	1.6	1.6	1.7	1.6	1.8
Return on average equity (ROAE)[b]	6.6	13.7	14.1	16.1	15.1	15.7
Adjusted ROAA[c]	1.5	1.6	1.5	1.7	1.6	1.7
Net operating income indicator[d]	1.6	1.9	1.9	2.0	1.9	1.9
Net interest income indicator[e]	3.6	3.3	3.4	3.0	2.9	2.8
Indicator of general administrative expenses and depreciation[f]	3.0	2.7	2.6	2.3	2.2	2.2
Ratio of interest income from loans to average loans	11.3	9.6	8.7	8.1	7.7	7.3
Ratio of interest expense on deposits to average deposits	3.2	2.8	2.5	2.4	2.5	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	2.7
Share of impairment loss in total loans to financial institutions	5.1	3.1	2.0	0.3	0.3	0.2
Share of impairment loss in total loans to households	2.9	2.2	1.8	2.6	2.2	2.1
Share of impairment loss in total loans to other enterprises	7.3	6.2	4.2	4.3	3.6	3.1
Share of specific provisions in total off-balance sheet risk	1.8	0.4	0.1	0.0	0.0	0.0
Ratio of f/c loans granted to f/c deposits and loans received	8.3	11.3	10.2	11.2	15.6	18.7
Total f/c assets to total f/c liabilities ratio	51.8	44.5	49.3	50.5	50.7	51.4
Long f/c position to regulatory capital ratio	11.3	12.8	13.9	12.1	7.7	4.2
Short f/c position to regulatory capital ratio	4.8	2.7	1.4	0.8	1.6	2.9
Ratio of overdue claims to specific provisions for loans to other enterprises	121.2	128.7	131.5	128.2	129.4	137.9
Ratio of overdue claims to specific provisions for household loans	113.9	116.3	105.6	109.9	102.7	106.2
Ratio of overdue claims to specific provisions for loans and deposits	108.4	117.5	117.2	112.1	109.0	124.9
Share of deposits and loans received from non-residents in total liabilities	15.4	21.7	26.7	28.4	12.0	13.2
Capital adequacy ratio[g]	18.5	17.4	16.5	15.3	14.6	12.9
Total capital to total assets ratio	9.2	9.5	8.9	8.6	9.0	9.4
Tier 1 to risk exposures ratio	16.9	15.2	14.1	13.1	13.0	11.6
Ratio of short-term loans extended to total short-term deposits and loans received	32.2	37.0	35.5	35.0	34.3	38.1
Loan to deposit ratio	59.3	67.0	66.2	67.3	71.2	76.5
Share of loans received from the CNB and domestic banks in total loans and deposits received	0.8	0.9	2.1	1.5	2.8	2.1

a Percentage share of pre-tax profit in average assets.
b Percentage share of after-tax profit in average equity.
c Pre-tax profit excludes extraordinary income and expenses.
d Percentage share of net operating income before loss provisions in average assets.
e Percentage share of net interest income in average assets.
f Percentage share of general administrative expenses and depreciation in average assets.
g Regulatory capital to total risk exposure ratio.

24 According to unconsolidated preliminary Bank Statistical Reports at 30 June 2006 and unconsolidated revised Bank Statistical Reports for the previous periods, available on 8 September 2006 (excluding banks undergoing winding-up proceedings). All the indicators were calculated based on aggregate unconsolidated banking sector data on a net basis (with the values of asset items reduced by corresponding specific provisions). For indicators calculated on the basis of an average balance of an item, the averages were calculated as the arithmetic mean of the balance at the beginning and at the end of the period for which the indicator is calculated. All the flow indicators as at 30 June 2006 were calculated as the sum of values in the last two quarters in 2005 and the first two quarters in 2006. This methodology results in less volatile, that is, less seasonally sensitive indicators, but also generates slight discrepancies in their values from those of similar indicators in other CNB publications.

Table B Selected Debt Indicators of Non-Financial Sectors[25]
(in %)

Indicator	2001	2002	2003	2004	2005	6/2006
Household debt						
– as % of GDP	19.0	24.7	28.9	32.1	35.9	38.0
– as % of gross disposable income[a]	37.0	49.3	63.5	68.4	81.6	89.2
– as % of household bank deposits	43.4	60.8	71.0	77.2	82.8	87.7
– year-on-year rate of growth	29.7	42.5	27.9	19.2	20.2	24.1
Debt of non-financial corporations						
– as % of GDP	42.9	45.0	45.3	47.9	52.5	55.8
– as % of corporate bank deposits	352.0	306.9	290.0	303.5	351.4	376.7
– year-on-year rate of growth	8.5	14.6	10.4	13.3	18.0	22.8
TOTAL - non-financial private sector						
– as % of GDP	61.9	69.7	74.2	80.0	88.4	93.8
– year-on-year rate of growth	14.2	23.2	16.6	15.6	18.9	23.3
General government debt[b]						
– as % of GDP	42.3	42.1	43.4	46.4	47.4	46.0
– year-on-year rate of growth	11.8	9.1	12.7	14.7	10.0	4.2
– interest paid as % of GDP	2.0	2.1	2.0	2.1	2.2	2.2
TOTAL - non-financial sector						
– as % of GDP	104.2	111.8	117.6	126.4	135.8	139.8
– year-on-year rate of growth	13.2	17.5	15.2	15.3	15.6	16.3
Implicit interest payments[c]						
– households, as % of gross disposable income	3.8	4.4	5.7	5.9	6.5	6.9
– non-financial corporations, as % of GDP	3.4	3.2	3.0	2.9	3.0	3.1

a Household gross disposable income is estimated on the basis of data from two CBS publications: the Survey on Household Consumption and the Statistical Yearbook of the Republic of Croatia. Household data except for 2001, were estimated on the basis of data on population migration.

b According to an internally consistent broadest coverage of the general government, including the CBRD debt and excluding non-exercised government guarantees. All deviations from this indicator calculated on the basis of official CNB or MoF statistics may be attributed to discrepancies in the general government coverage.

c $\frac{\text{Banks' interest income from household loans}}{\text{Total household debt to banks}} \times \text{Total household debt}$

25 Expert estimate based on data of the CNB, CBS, Fina, DINADOS, HAGENA, CROSEC and MoF, available on 18 October 2006. Data may be subsequently revised within the regular revision of external debt statistics. Debt data exclude debt to issuers of non-bank cards – indicators may be revised upwards if sectoral data on claims of card issuers become available. Debt sectorisation according to non-bank financial institutions is estimated on the basis of incomplete data – value of indicators for some sectors may be revised up with a parallel adequate decrease for other sectors if sectoral claims of non-financial institutions become available. Debt data include neither the sector's internal debt nor mutual debts of non-financial sectors.

References

Analysis of the External Debt of the Republic of Croatia, Croatian National Bank, April 2006
CNB Bulletin, No. 119, Croatian National Bank, October 2006
CNB Bulletin, No. 116, Croatian National Bank, June 2006
CNB Bulletin, No. 113, Croatian National Bank, March 2006
Financial Stability Review, European Central Bank, June 2006
Monthly Bulletin, European Central Bank, September 2006
Global Financial Stability Report, International Monetary Fund, September 2006
Informacija o poslovanju poduzetnika RH u razdoblju siječanj – lipanj 2006. (*Report on the Operations of Entrepreneurs in the RC, January to June 2006,* Financial Agency, September 2006)
Macroprudential Analysis, Nos. 1 – 3, Croatian National Bank
Monthly Report for June 2006, Croatian Financial Services Supervisory Agency, July 2006
World Economic Outlook, International Monetary Fund, September 2006
Investment Funds Act (Official Gazette 150/2005)
Act on Amendments to the Foreign Exchange Act (Official Gazette 140/2005)
Act on Amendments to the Act on Housing Savings and Government Incentive to Housing Savings (Offcial Gazette 95/2005)
Act on the Croatian Financial Services Supervisory Agency (Official Gazette 140/2005)
Insurance Act (Official Gazette, 151/2005)
Budget Act (Official Gazette 96/2003)
Accounting Act (Official Gazette 146/2005)
Audit Act (Official Gazette 146/2005)

Internet Sources

Official web sites of the central banks of EMU members, Bulgaria, the Czech Republic, Hungary, Poland, Romania, the USA and Slovenia
Banka magazine: www.bankamagazine.hr
Croatian Bureau of Statistics: www.dzs.hr
European Central Bank: www.ecb.int
Eurostat: www.europa.eu.int/comm/eurostat
Croatian Chamber of Economy: www.hgk.hr
Croatian National Bank: www.hnb.hr
Croatian Banking Association: www.hub.hr
Croatian Registry of Credit Obligations: www.hrok.hr
International Monetary Fund: www.imf.org
Ministry of Finance of the Republic of Croatia: www.mfin.hr
Ministry of Justice of the Republic of Croatia: www.pravosudje.hr
Public-private Committee for Consultations on Croatian Securitisation Act: www.crosecuritization.com
National Land Registry and Cadastral Reform Programme: www.uredjenazemlja.hr

Abbreviations

bn	– billion
CAR	– capital adequacy ratio
CBRD	– Croatian Bank for Reconstruction and Development
CBS	– Central Bureau of Statistics
CCE	– Croatian Chamber of Economy
CNB	– Croatian National Bank
CPI	– consumer price index
HROK	– Croatian Registry of Credit Obligations
CROSEC	– Croatian Securities and Exchange Commission
DAB	– State Agency for Deposit Insurance and Bank Rehabilitation
DINADOS	– Directorate for the Supervision of Insurance Companies
EBRD	– European Bank for Reconstruction and Development
ECB	– European Central Bank
EMU	– Economic and Monetary Union
EONIA	– Euro Overnight Index Average
EU	– European Union
EUR	– euro
Fed	– Federal Reserve System
f/c	– foreign currency
Fina	– Financial Agency
GDP	– gross domestic product
GVA	– gross value added
HAGENA	– Agency for Supervision of Pension Funds and Insurance
HRK	– Croatian kuna
hybr.	– hybrid
IAS	– International Accounting Standards
IBRD	– International Bank for Reconstruction and Development
IMF	– International Monetary Fund
instr.	– instruments
m	– million
MoF	– Ministry of Finance
OTC	– over-the-counter market
R.	– Republic
ROA	– return on assets
ROAA	– return on average assets
ROAE	– return on average equity
ROE	– return on equity
SAA	– Stabilisation and Association Agreement
S&Ls	– savings and loan associations
subord.	– subordinated
USD	– US dollar

ZMM	– Zagreb Money Market
ZSE	– Zagreb Stock Exchange

Symbols

–	– no entry
....	– data not available
0	– value is less than 0.5 of the unit of measure being used
ø	– average
a, b, c,...	– indicates a note beneath the table and figure
*	– corrected data
( )	– incomplete or insufficiently verified data

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