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RISK AND PROFITABILITY IN BANKING SECTOR OF NEW MEMBERS STATES AND CANDIDATE COUNTRIES

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Abstract: With the recent accession of the new member states to the European Union, there is clearly a need for detailed analysis of their banking system risk and profitability. Rapid credit growth has been a recent feature of financial development in all countries under review and thus constitutes the main financial stability challenge. In general, monetary authorities have responded to these challenges by tightening monetary conditions and prudential standards, with concrete measures also reflecting the different monetary and exchange rate regimes in the region.

Key words: risk, profitability, candidate countries, new member's states,

Over the last years, new member states (Bulgaria and Romania) and candidate countries (Croatia and Turkey) have seen strong economic growth, coupled with disinflation or low inflation. Domestic demand, fostered partly by rapid credit growth and strong capital inflows, has been the main engine of growth. In addition, given the increasing integration with the euro area and the EU, export performance has been buoyant, but outpaced by even stronger import growth.

Recently, however, inflation has picked up or disinflation has slowed down, as the expansion of domestic demand has been accompanied by several negative supply shocks, including a significant rise in energy prices, adjustments in regulated prices, exogenous shocks, such as floods, and increasing wage pressures. Current account deficits have remained high or increased from already high levels. External private debt has grown rapidly, as banks and enterprises have substantially increased their borrowing abroad.

Against this background, monetary authorities have tightened monetary conditions. Monetary and exchange rate regimes vary between the countries under review, eliciting different policy responses. Countries with a peg or tightly managed float have mainly relied on tightening prudential measures, raising minimum reserve requirements and introducing limits on credit growth. By contrast, countries with a floating exchange rate regime and inflation targeting have also allowed for nominal exchange rate appreciation and have either raised or curbed the decline in interest rates. Moreover, in all countries, fiscal policy has lent some support to monetary policy in safeguarding macroeconomic stability, as fiscal deficits have either declined or turned into surpluses.

Bulgaria's financial sector is largely bank based, private and foreign-owned, and profitable. Moreover, the Romanian banking sector is generally composed of well capitalized, profitable and mostly foreign-owned banks.

The Croatian financial sector is largely bank based, private and foreign-owned, relatively concentrated and generally profitable. The Turkish financial sector is showing signs of increasing confidence: the portion of assets and liabilities in local currency is rising, and there is growing foreign interest in Turkish banks, although the share of assets held by foreign owned banks is still comparatively small.

Table no.1. Profitability of banking sectors

	2000	2001	2002	2003	2004	2005
Ratio of net interest income in operating income						
- Bulgaria	43,7	55,1	55,0	65,9	68,1	78,0
- Romania	0,4	20,0	31,7	44,2	49,4	43,8
- Croatia	68,6	78,8	70,8	74,3	69,2	70,4
- Turkey	76,9	158,3	64,3	48,1	67,2	65,5
Loan loss provision expenses in % of total income:						
- Bulgaria	8,6	-8,7	1,3	3,7	9,4	13,5
- Romania	16,1	4,7	2,0	5,5	7,3	6,0
- Croatia	20,6	13,7	6,6	7,7	6,6	4,9
- Turkey	25,0	76,7	24,7	14,6	14,0	19,9
Return on assets:						
- Bulgaria	3,1	2,7	1,9	2,0	2,0	2,0
- Romania	1,5	3,1	2,6	2,2	2,0	1,7
- Croatia	1,4	0,9	1,6	1,6	1,7	1,7
- Turkey	-0,3	-5,7	1,1	2,2	2,1	1,1
Return non equity:						
- Bulgaria	22,6	21,9	15,9	18,7	20,0	21,6
- Romania	12,5	21,8	18,3	15,6	15,6	12,9
- Croatia	3,8	3,1	3,0	3,5	3,1	
- Turkey	-62,4	-58,4	9,2	15,8	14,0	8,6

The profitability of the ***Bulgarian*** *banking system has remained fairly stable and relatively high over the past few years*. Return on assets has fluctuated between 2% and 3% (compared with 0.4% in the euro area in 2004), while return on equity initially increased to 22% in 2000 and 2001, then fell back to between 16% and 19% in 2002 and 2003, and increased again to above 20% since 2004 (see Table no.1). This evolution has been due to the rapid credit growth to domestic sectors and the simultaneous decrease in the net foreign assets position, as interest income on domestic assets significantly exceeds that on foreign assets.

Loan loss provisioning contributed to gross proof its in 2001 due to the release of large reserves (9% of operating income) that were created between 1999 and 2000. Since then, in the light of the rapid credit expansion, reserve provisions have increased, reaching 13.5% of operating income in 2005.

Romanian *banking sector has been characterized by a relatively high level of profitability.* Rising net interest income has been one of the main drivers of profitability in recent years, mainly reflecting the rapid growth in domestic credit. This marks a substantial change from the late 1990s, when net noninterest income constituted the bulk of revenues, due to the arbitrage opportunities opened up to banks by the imperfections in various segments of the financial and exchange markets. A substantial decline in the net costs of loan loss provisioning has been another important factor supporting profitability, but, more recently, these have increased again, which partly

explains the most recent drop in profitability, as measured by return on equity and return on assets.

Operating income has been declining, and this trend might continue in the light of decreasing interest rate margins, increasing competition and a falling share of domestic deposits, which are considered to be a relatively cheap source of financing.

Owing to an improvement in cost management and overall efficiency, the profitability of the banking sector has increased over the past few years.

Owing to the fall in interest rates, net interest income as a percentage of average assets and the share of net interest income in operating income declined from 2001 to 2005 (from 3.5% to 3% and from around 80% to 70% respectively), while net noninterest income as a percentage of average assets rose slightly.

Operating income remained almost stable at 4 to 4,5% of average assets. After the crises of 1998 and 2001 the high net costs of loan provisioning as a percentage of operating income could be largely reduced and has stood at 5% to 7% in the past few years.

*Following the crisis, the **Turkish** banking sector has returned to profit since 2002.* The crisis years saw very large losses in the banking sector. Since then, profitability has picked up, with return on equity and return on assets standing at 9% and 1% for the banking sector as a whole, as of September 2005 (see Table no.1).

State owned banks outperformed the privately owned banks in 2003 and 2004, in terms of both return on assets and return on equity, due to their lower levels of capital and their dominant position in the sector, which gives them easy access to relatively cheap funding (deposits).

Net interest income is the main source of income in the Turkish banking sector, mainly reflecting interest income from banks' securities portfolios and interest income from loans.

Table no.2 Credit risk

	2000	2001	2002	2003	2004	2005
Domestic credit growth (annual percentage change):						
- Bulgaria	31,0	26,0	27,4	33,9	34,2	33,0
- Romania	11,4	26,9	39,9	50,4	21,2	49,7
- Croatia	10,1	23,2	33,6	16,8	13,1	20,3
- Turkey	63,9	100,6	29,0	18,3	21,2	16,1
Credit growth to the private sector (annual percentage change):						
- Bulgaria	17,0	32,1	44,0	48,3	48,6	32,4
- Romania	-10,2	16,5	14,2	23,7	18,7	37,8
- Croatia	8,5	24,7	31,6	15,9	13,6	18,5
- Turkey	72,1	22,7	10,2	44,6	52,8	41,3
Credit growth to the households:						
- Bulgaria	17	52,4	47,6	82,3	60,6	46,9
- Romania	3,2	44,0	122,0	214,6	44,8	65,7
- Croatia	21,0	29,3	43,0	27,7	8,7	20,3
- Turkey	208,4	-27,9	34,4	95,8	103,4	69,0
Non-performing loans:						
- Bulgaria	7,9	3,3	2,4	3,2	2	2,2
- Romania	3,8	2,5	1,1	3,4	2,9	2,6
- Croatia	9,5	7,3	5,9	5,1	4,5	4,0
- Turkey	11,1	25,2	17,6	11,5	6,0	5,4

	2000	2001	2002	2003	2004	2005
Share of foreign currency loans in total loans:						
- Bulgaria						
- Romania	35,4	35,5	41,3	42,8	47,5	47,3
- Croatia	59,5	59,8	62,9	55,4	60,8	57,9
- Turkey	85,6	84,9	80	74,4	75,8	77,5
	43,4	58,7	57,6	46,3	36,5	30,9
Share of foreign currency deposits in total deposits:						
- Bulgaria						
- Romania	59,2	58,3	54,6	52,4	46,7	46,5
- Croatia	47,0	49,3	44,7	42,5	41,2	34,5
- Turkey	91,3	91,2	89,4	87,1	86,8	84,3
	46,1	59,7	57,9	49,3	44,8	39,3

Since 2000, real domestic credit in **Bulgaria** has grown on average by more than 30% annually (see Table no.2). Credit growth boosts financial deepening and can largely be considered a catching-up phenomenon brought about by deregulation, liberalization and privatization. It allows for a better allocation of savings to investment opportunities and facilitates higher growth. Although no significant deterioration in bank loan portfolios has been observed, most financial sector indicators are "lagging", thus credit growth developments require close monitoring.

While credit growth is high, the level of private sector credit is still relatively low and the debt burden of households and enterprises appears to remain contained.

Lending to households and mortgage lending have risen particularly quickly in recent years (see Table no.2), albeit from very low levels. Household debt amounts to around 16% of GDP (2005), which, together with a comparatively low ratio of interest payments to disposable income of around 1% (that of the euro area was 4,5% in 2004), does not constitute a heavy debt service burden.

The share of foreign currency lending is increasing and accounts for almost half of total lending, but credit risk associated with increased foreign currency exposure of the private sector is limited, given the CBA and the fact that lending in currencies other than the lev or the euro is almost insignificant (see below). An increase in interest rates from their current low levels could affect borrowers more significantly. However, as the portion of disposable income spent on interest payments is relatively low, the capacity of households to service their debt may withstand a potential increase in interest rates.

Overall credit risk may be rising, but from a relatively low level. Given the high credit growth, lending standards may have fallen, which, together with increasing debt burdens, would trigger a rise in the credit risk. However, as yet, there is no evidence of this in the credit quality figures. The share of nonperforming loans in total loans stands at 2,2% (see Table no.2).

*The **Romanian** banking system is primarily exposed to credit risk.* As the degree of financial intermediation continues to rise rapidly and bank assets increasingly consist of loans, credit risk is likely to remain of concern in the near future.

Ongoing financial deepening in the Romanian banking sector is translating into rapid private sector credit growth, with household credit growing much faster than corporate credit, albeit from a much lower level (see Table no.2).
Real domestic credit in Romania grew at an average of 18,4% per annum between 2000 and 2005, up from the average 5% growth rate between 1995 and 1999.

However, while credit to the private sector has been the true driver of total credit growth, lending to the public sector has actually been decreasing since 2002. Real

claims on the private sector grew at an average of 18,3% per annum in the period 2000-04, supported by lower interest rates, as well as rising household incomes and real estate prices, which made household credit the most dynamic category. Overall, the share of household credit in total private sector credit grew from 5,7% in 2000 to 35,2% in December 2005.

Despite these developments, credit quality has been improving since 2003. Non-performing loans (unadjusted exposure of doubtful and loss loans and interests over total classified loans and interests) and doubtful and past due claims (over total net assets) have decreased, to 2,6 and 0,1 in 2005, respectively. These figures should be interpreted with some caution however, particularly because they benefited from the favorable economic conditions and are therefore subject to change in the event of a cyclical downturn. Moreover, the nonperforming loan ratio tends to be biased downward during times of strong credit growth, when the ratio's denominator is rapidly increasing.

Finally, rapid credit growth can be associated with an overstretching of risk management capabilities (and consequently less careful analysis), as well as with the financing of less creditworthy clients and less profitable projects. In particular, this may be the case when bank managers are focusing on volumes in a bid to win market share.

*The prime risk for **Croatian** banking sector is credit risk.* Credit growth to the private sector peaked at 24.7% and 31.6% in 2001 and 2002 respectively (see Table 4.9). As this rapid expansion of credit was being financed increasingly through external borrowing, mainly from parent banks, the CNB introduced higher reserve requirements, especially for foreign credit, and made it mandatory for commercial banks to keep a minimum of foreign exchange liquid assets. Consequently, credit growth to the private sector as a whole slowed down initially but edged up again in 2005. At the same time, lending to households has continued to rise rapidly. This can be attributed to the fact that the corporate sector increasingly resorted to direct borrowing from foreign banks and non-bank financial institutions (leasing), as well as to increases in trade credit. The household sector has limited access to these sources of credit and banks have found enough capital and liquidity to continue expanding their lending to private households.

Credit risk from the household sector appears to be on the rise as debt levels and debt service burdens increase. Rapid credit growth may lead to higher credit risk through a number of channels. First, debt levels and debt service burdens have increased, making debtors more vulnerable to any kind of shock. Second, rapid credit growth may entail lower vetting standards and thereby cause lending to less creditworthy customers.

Furthermore, local managers of foreign banks may be more concerned about lending volumes than the risks of such a high growth environment. Anecdotal evidence suggests that banks have indeed begun more risky lending, for instance by accepting loans with debt service burdens in excess of 50% of disposable income.

Foreign-currency related risk is an important part of credit risk and stems from the high proportion of banking system activity denominated in or linked to euro. Domestic borrowers that are not foreign exchange earners bear the bulk of foreign exchange risk. While this risk is somewhat mitigated by the fact that most deposits are also in euro, net debtor households still bear foreign exchange rate risk and the structure of credit commitments directly exposes households to a high level of currency risk.

Households' borrowing in currencies other than the euro is increasing, particularly in the Swiss franc (11% of total households' borrowing in September

2005). The CNB is trying to improve the monitoring of borrowers' exposure to foreign exchange risk and further strengthen supervision. This includes requiring banks to collect information on their borrowers' foreign currency exposure as part of their credit risk evaluation, and issuing a guideline for banks to report their exposures to foreign-exchange induced credit risk to the CNB.

Furthermore, the share of non-performing loans in total loans has declined in recent years from the peak that followed the eruption of the banking crisis. In the period 2000-2005, it decreased from 9.5% to 4%.

In line with the recent shift to core banking activities, the credit risk linked to the private sector has risen. The increase in the share of loans in total assets has added another dimension to the credit risk borne by the banking sector, which was traditionally overly dependent on government securities for revenue generation.
Credit demand stems from large corporations, SMEs and consumers, as around 95% of loans are extended to the private sector. The latter two categories, however, have historically played only a marginal role in banks' loan portfolios.
Only since 2003 has consumer lending picked up substantially.

Historically, NPLs have been a key problem for the ***Turkish*** *banking sector.* In the past, it faced three kinds of problem with NPLs, namely those linked to related party lending, those of state owned banks and those of privately-owned banks due to the economic downturn following the 2000 and 2001 crises. The restructuring programme that followed the crises addressed these issues. Related party lending was restricted by a new regulation, and the state-owned banks were recapitalized to improve the provisioning of NPLs. The NPLs of the privately owned banks were addressed as part of the "Istanbul Approach", a voluntary framework aimed at facilitating the debt restructuring of mainly large corporate borrowers. As a result, the overall ratio of NPLs decreased substantially to around 5% of gross loans in 2005 (as of September) compared with 25% of total loans in 2001. At the same time, loan loss provisions increased over the same period from 49% to almost 90% of non-performing loans.

Table no. 3. Liquidity risk

	2000	2001	2002	2003	2004	2005
Liquid assets as percentage of total assets:						
-Bulgaria	22,9	27,2	28,0	20,0	18,6	18,4
- Romania	52,4	52,4	50,4	39,2	36,4	31,4
-Croatia	31,5	37,6	29,7	32,8	31,3	28,0
- Turkey	32,2	31,0	34,3	38,8	37,4	39,1
Ratio of short-term assets on short-term liabilities:						
-Bulgaria	117,0	111,3	101,2	68,9	72,9	75,1
- Romania	115,3	116,2	118,5	207,2	197,0	239,8
-Croatia	110,4	126,7	97,7	117,2	120,4	104,5
- Turkey	-	81,1	75,1	80,5	82,7	82,7

Source: BNB, EBRD, BNR, CNB, CBRT, BRSA, IMF

Liquidity ratios in ***Bulgarian*** *banking sector have been declining over the last five years, but may still be considered adequate.* Liquid assets (cash and securities) represent around 18% of total assets and the ratio of short-term assets (cash and securities and credit up to 3 months) to short-term deposits (up to 3 months) is around 75%. Access to liquidity from the interbank market is still relatively limited, even though the size of interbank claims and interbank money market turnover has increased over the past few years.

Under the CBA, the availability of reserves imposes strict limitations on the role of the BNB as a liquidity provider for the banking system.

Liquidity risk has been decreasing in ***Romanian****, as the system as a whole is highly liquid.* The ratio of liquid assets to total assets has remained relatively constant, due, among other things, to sizeable deposits at the central bank originating from its sterilization activity. The ratio of short-term assets to short-term liabilities has increased together with the ratio of loans to deposits.

Liquidity is high by international standards, because most loans have a short maturity and deposits with the central bank are considered highly liquid. Stress tests by both the IMF and the BNR find liquidity risk to be small, indicating that most institutions would be able to withstand large deposit withdrawals. The contagion risk from the interbank market is negligible, as most interbank assets and liabilities are held at the BNR.

In ***Croatia*** *liquidity risk has been increasing but is still low, as the system as a whole is still relatively liquid.* The decline in the ratio of liquid assets to total assets and the rise in the loan-to-deposit ratio point to deterioration in liquidity in the Croatian banking sector over the past few years.

This can be partly attributed to the CNB's active policy to reduce liquidity through administrative measures, such as special reserve requirements on foreign currency assets. But, despite these measures, liquidity is still high, which is also reflected in the large amounts of free reserves held at the central bank. Stress tests by the CNB suggest that banks would withstand a substantial (35%) one-off deposit outflow. At the same time, however, international financing risk has been growing due to an increasing share of liabilities being owed to non-residents. Even though most of these are owed to foreign banks, which are, in most cases, probably the parent banks, this development warrants monitoring.

Liquidity is ample and liquidity ratios appear to be improving in ***Turkey****.* Liquid assets have been increasing both as a percentage of total assets and as a percentage of short-term liabilities.

Cash and cash equivalent assets stood at around 8% of total assets in September 2005. The ratio of assets to liabilities based on remaining maturities, however, has declined, due to banks' preference for short-term funding in the light of declining interest rates and increasing longer-term lending because of macroeconomic stability.

Table no.4. Shock absorbing factors

	2000	2001	2002	2003	2004	2005
Loan loss provisions as percentage of non-performing loans:						
-Bulgaria	-	-	-	52,8	48,9	49,2
- Romania	85,7	78,2	53,7	59,4	68,9	55,1
-Croatia	79,9	71,8	68,1	60,8	60,3	58,0
- Turkey	63,1	49,0	64,2	88,5	88,1	89,6
Capital adequacy ratio:						
-Bulgaria	35,6	31,3	25,2	22	16,1	15,2
- Romania	23,8	28,8	25	21,1	20,6	20,2
-Croatia	21,3	18,5	17,2	16,2	14,1	15,8
- Turkey	-	21,0	25,6	31,0	28,8	23,3

Source: BNB, EBRD, BNR, CNB, CBRT, BRSA, IMF

Relatively high profitability and a solid capitalization are the basis for the banking sector's capacity to absorb negative shocks. Despite declining interest rate

margins, the profitability of the banking sector in **Bulgaria** continues to be relatively high, as evidenced by the return on equity and return on assets ratios. The capital adequacy ratio has decreased over recent years, but still comfortably exceeds the minimum requirement of 12% set by the BNB (and that of 8% in the Basel Capital Accord). Provisions cover more than two-thirds of nonperforming loans.

A reduction in spreads, owing to increased banking competition, fast credit growth, and macroeconomic stability, has recently led to a decline in the profitability of ***Romanian*** *banks.* The return on assets decreased from 3.1% at the end of 2001 to 1.7% at the end of 2005, and the return on equity decreased from 21.8% to 12.9% over the same period (see Table 3.7). Further declines in spreads triggered by continued nominal convergence and incoming capital flows for example, could have a further dampening impact on banks' profitability, and may thus increase their appetite for risk.

Privatization and recapitalization efforts, as well as increasingly higher minimum capital requirements, have led to a well capitalized and sound banking system. The capital adequacy ratio, which stood at 28.8% in 2001 (partly as a result of enhanced risk aversion towards lending in the aftermath of the banking crisis), has fallen (to 20.2% in December 2005), but is still well above the minimum requirement of 12%. At the same time, loan loss reserves and provisions (as percentage of non-performing loans) have decreased from 85.7% in 2000 to 68.9% in 2004.

Profitability remains relatively high and provides a buffer against shocks. For the banking system as a whole, the return on average assets was 1.7% at the end of 2005, while the return on average equity stood at 16% (see Table no.4).

Banks appear well capitalized, and, despite a decreasing trend, capital adequacy ratios remain well above requirements. Commercial banks' capital adequacy ratios ranged between 14 and 16% during 2003 and 2005, and all banks posted capital adequacy ratios in excess of the minimum 10% statutory limit.

Following the new Banking Law (2002) and by-laws, market risk coverage is now included in the capital adequacy calculation. However, capital formally assigned to non-credit risk constitutes only 3.9% of total capital (June 2005), which seems low, even for the limited market risks of the **Croatian** banks. Moreover, banks do not take operational risk into account. That said, given that banks have capital ratios in excess of regulatory requirements, they appear sufficiently well capitalized to withstand shocks related to operational and market risk. Stress tests by the CNB using 2004 year-end data show that credit risk still poses the greatest threat to the Croatian banking system but that most banks would be able to tolerate substantial losses arising from asset deterioration.

Moreover, the stress tests find small banks to be even less vulnerable to credit risk shocks than the large banks.

The ***Turkish*** *banking sector has increased its shock absorption capacity since the 2000 and 2001 crises.* Profitability levels appear to be adequate and more sustainable in the long run, in contrast to the profits of the 1990s that stemmed from the government's unsustainable financing needs. The capital adequacy ratio stood at 23% as of September 2005.

Stress tests suggest that banks would be able to cope with deterioration in the quality of their loan portfolio. Calculations by the Central Bank of the Republic of Turkey suggest that an increase in the NPL ratio from its current level of around 5% to 21% of total loans would reduce the capital adequacy ratio to 18.8%, still comfortably above the minimum level required. Under this scenario, all new NPLs are deemed to

fall in the 100% risk weight group. Hence, the scenario analysis shows that the sector's shareholders' equity levels are sufficient to cover credit risk.

Progress has been made in strengthening the regulatory and supervisory framework. The authorities responsible for supervising and regulating the financial sector are the Banking Regulation and Supervision Agency (BRSA), the Under-Secretariat of the Treasury under the Prime Ministry of the Republic of Turkey and the Capital Markets Board of Turkey (CMB). Following the 2000 and 2001 crises, the BRSA overhauled the regulatory and supervisory framework, bringing it more up to date with best practices. As a result, supervision has improved considerably, so that some of the main problems leading to the 2000 and 2001 crises should be able to be avoided in the future.

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