

## **BANKING IN SOUTH EASTERN EUROPE: MOVING INTO THE SPOTLIGHT<sup>1</sup>**

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### **Abstract**

In this paper we analyze the growth prospects and the stage of the banking sectors development in South Eastern Europe (SEE) compared to those of Central Eastern Europe. We estimate that the SEE banking market will grow by 17% p.a. (in EUR terms) until 2011. The retail sector is expected to remain the main engine of growth with more sophisticated retail products like investment funds and old-age provisioning gaining in importance. Although our credit-to-GDP model shows that the degree of financial intermediation is still below equilibrium levels, the high pace of credit growth in some countries raises concerns about possible threats to macroeconomic and financial stability. However, bank's strong foreign ownership, sufficient capitalisation, still benign levels of non-performing loans and prudential and regulatory tightening measures by the central banks mitigate these risks.

**Key words:** Banking sector development, South Eastern Europe, credit boom, retail lending, mortgage markets.

**JEL Classification:** E51, E58, G21.

### **The region's banking sectors enjoy favourable growth prospects**

Solid economic growth, progress with macroeconomic stabilisation, prospective EU/EMU membership and very low levels of financial intermediation underscore the great potential. According to our estimates, the South Eastern European banking market (in EUR terms) will grow by 17% p.a. until 2011. Romania's banking sector will outperform with expected growth of 27% p.a.

### **Retail lending and investment funds are pacing ahead**

Driven by falling real interest rates coupled with increasing household wealth, retail lending (esp. mortgages) is expanding at sonic speed. As the structure of savings is gradually shifting towards more sophisticated products and old-age provisioning is gaining in importance, the investment fund industry is receiving a strong growth impetus.

### **Rapid credit growth poses risk to financial stability**

Our credit-to-GDP model shows that the degree of financial intermediation is still below equilibrium levels, so that rapid growth may well just indicate convergence. Still, the high pace of credit growth in some countries raises concerns about possible threats to macroeconomic and financial stability. Especially, unhedged foreign-currency borrowing by households is a key risk. However, banks' strong foreign ownership, sufficient capitalisation, still benign levels of non-performing loans and prudential and regulatory tightening measures by the central banks mitigate these risks.

### **Legal frameworks have improved strongly**

Over the last couple of years strong efforts have been made to bring the region's legal and regulatory frameworks in line with EU directives and Basel Core Principles. The highest degree of progress has been made in Bulgaria, Croatia and Romania, while the other SEE countries lag behind.

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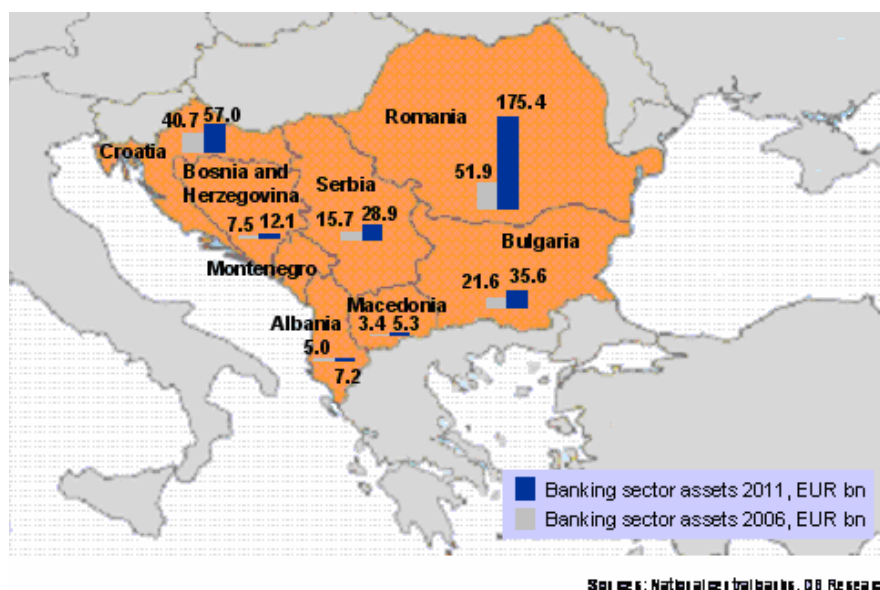


Fig.1. Strong growth prospects in South Eastern European Banking sectors

### Spotlight on South Eastern European banking sectors

Solid growth prospects, progress with macroeconomic stabilisation, prospective EU/EMU membership and still very low levels of financial intermediation warrant a close-up on the economies of South Eastern Europe (SEE)<sup>1</sup> with special emphasis on the banking sectors. While many studies have been written about the development of Central and Eastern European (CEE)<sup>2</sup> banking sectors, their SEE peers have not received as much attention. One important reason might be the relatively small size of many SEE banking sectors. This is why we have decided to look at those markets from both a regional and a country-specific perspective. This approach enables us to highlight the attractiveness of the region as a whole, but also to focus on country-specific developments. Moreover, visualising the head start of the aggregated CEE banking sector helps to sketch the likely future development path of SEE banking sectors.

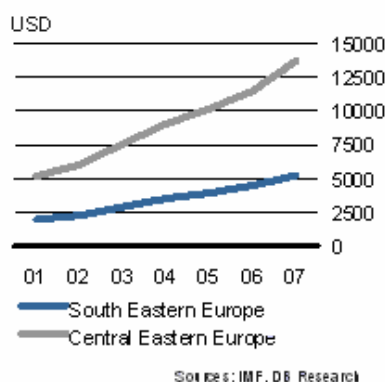


Fig. 2. SEE still lags in terms of GDP per capita

<sup>1</sup> For the purposes of this study, South Eastern Europe comprises Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Romania and Serbia.

<sup>2</sup> Central Eastern Europe stands for the Czech Republic, Hungary, Poland, Slovakia and Slovenia.

## Macroeconomic and institutional framework: South Eastern Europe is following the CEE path

A stable macroeconomic and institutional environment is essential for sound development of the banking sector. In terms of macroeconomic stabilisation and catching up to Western European income levels, the SEE countries lag their CEE peers by roughly 5 years. Figure 2 and 3 show that income catch-up and disinflation will reach CEE 2001-levels this year. In terms of EU membership prospects, the picture looks much more diverse. While Romania and Bulgaria entered the EU this January, Serbia, Albania and Bosnia and Herzegovina are not official candidate countries yet (see Table 1). The experience in CEE countries has shown that EU accession prospects are a crucial anchor for prudent macroeconomic policies. Therefore advances in membership prospects are essential for improvements in the operating environment of the banking sectors.



Fig. 3. Inflation has come down steadily

Table 1

### Mixed EU/EMU accession prospects Baseline scenario for ERM II and EMU membership

	2004	2005	2006	2007	2008	2009	2010-2012	2013-2014
CEE-5	EU							
Bulgaria				EU				
Romania				EU				
Croatia	Official candidate country							
Macedonia	Official candidate country							
Albania	SAA signed							
Serbia	SAA* negotiations resumed							
Bosnia and Herzegovina	SAA negotiations started							

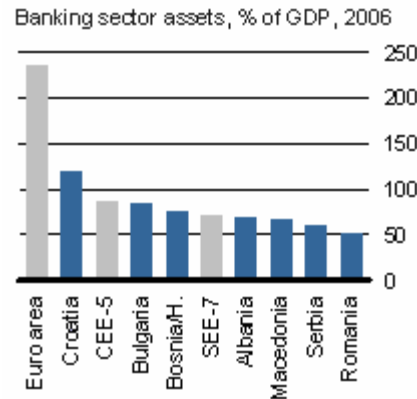
\* Stabilisation and Association Agreement.

Source: DB Research.

## Financial depth to increase in the next five years

The level of financial intermediation measured by e.g. banking sector assets in % of GDP is one important indicator for assessing the maturity of a banking sector. Despite the rapid expansion of credit in recent years the level of financial intermediation remains relatively low in the SEE region, with the exception of Croatia, compared to the CEE-5 and Euro area benchmarks (see Figure

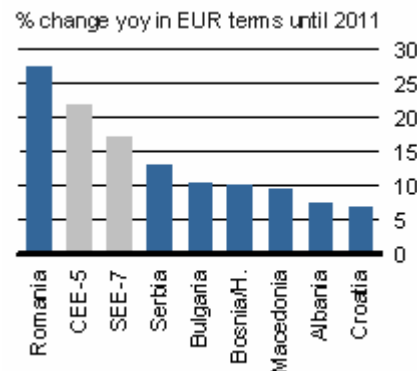
4). The financial sectors of almost all SEE countries were hit by banking crises in the course of the transition from the monobank system of a planned economy to a two-tiered banking system with privatised banks. Crises were followed by a sharp decline in public confidence in the banking system. Moreover, the Kosovo conflict in 1999 led to economic downturn throughout the SEE region and thus also negatively affected banking sectors. Over the last few years we have witnessed an impressive recovery of financial intermediation. Now, the interesting question is: How fast are banking sector assets expected to grow over the next five years?



Sources: National Central Banks, DB Research

Fig. 4. Banking sector assets

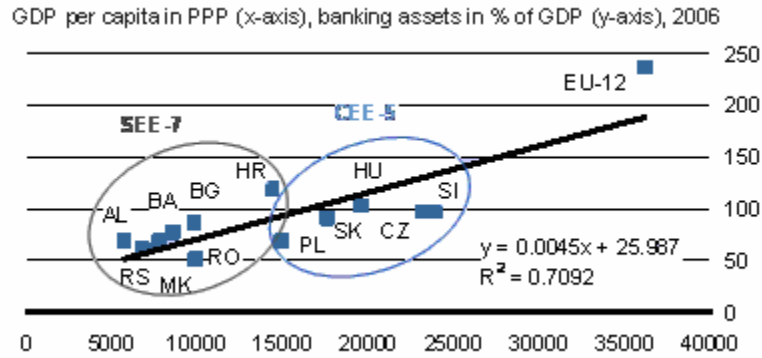
In order to project the future volume of banking sector assets we used a simple forecasting model, which is based on the empirical regularity that credit-to-GDP levels rise as per-capita GDP increases, known as financial deepening (see Figure 6)<sup>1</sup>. Taking into account our estimates for per-capita GDP growth in the next five years, we expect the following growth rates: the SEE banking sector (in EUR terms) will on average grow 17% p.a. until 2011. Romania will outperform with annual average growth rates of 27% (see Figure 5), nearly surpassing the Hungarian banking sector by size in 2011 (see Figure 7).



Source: DB Research

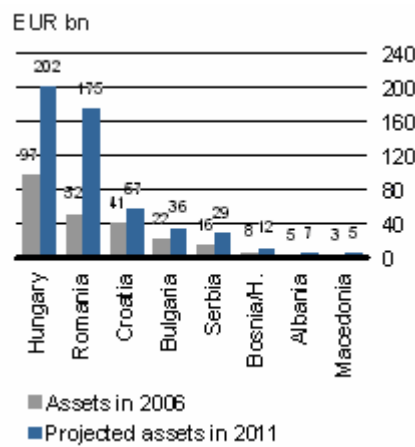
Fig. 5. Banking sector assets projected to grow rapidly

<sup>1</sup> Peter Backé, Balázs Égert and Tina Zumer (2006). Credit Growth in Central and Eastern Europe: New (Over)Shooting Stars? OENB.



Source: National Central Banks, IFS, DB Research

Fig. 6. Financial depth rises with increasing GDP-per-capita.

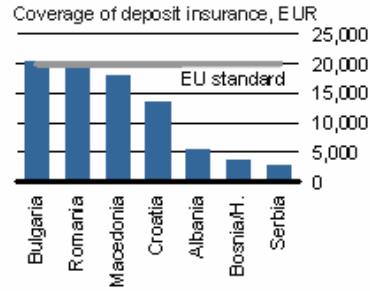
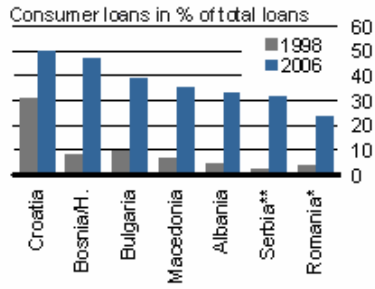


Sources: National Central Banks, Global Insight, DB Research

Fig. 7. What our forecast model reveals.

### Retail Sector is an Engine of Growth

Before the turn of the century credit to households only accounted for a small portion of total credit outstanding in SEE. Over the last couple of years the picture has changed dramatically. Driven by increased confidence in the banking sector and rising per-capita income, private sector credit and especially consumer lending expanded at sonic speed, with consumer loans accounting for 23% to 50% of total loans in 2006 (see Figure 8). While this trend is expected to continue over the next few years, the relative importance of different retail products is expected to change. As witnessed in the CEE countries, retail business development can roughly be divided into three main stages. The SEE countries have already gone through the first stage where deposits are the main business. At that stage the establishment of deposit insurance schemes (whose coverage still varies greatly, see Figure 9) bolstered the population's confidence in the banking system and mobilised savings. Currently the SEE banking sectors are at the second stage, where consumer credits, mortgage loans and credit cards are the dominating business areas. Later on, they will be slowly transitioning into the third stage where mutual fund investments and old-age provisioning will gain in importance as revenue pools for banks.



\*2001. \*\*1999.

Sources: National Central Banks, DB Research.

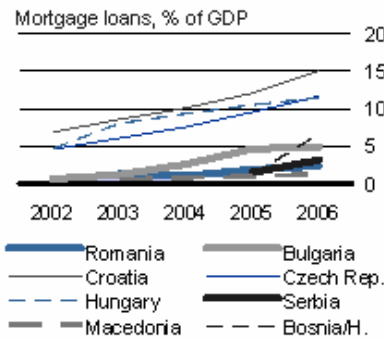
Sources: National authorities, DB Research.

Fig. 8. Structure of credit has changed dramatically

Fig. 9. Maximum coverage varies strongly

### Mortgage loans: a new dynamic business field

As a result of mass housing privatisation and the introduction of subsidy programmes for housing during the transition period, home ownership rates are comparably high in SEE countries (around 80%). Still, there is a huge demand for new housing construction and modernisation. First, there has been significant underinvestment in the last decades. Second, migration has led to housing shortages in booming metropolitan areas. Third, there is still a large backlog regarding floor space per capita (recently only 16m<sup>2</sup>)<sup>1</sup>. Fourth, there is generally a strong preference for owning instead of renting property. Legal reforms (e.g. the adoption of new laws on mortgages and the creation of sound land registers) have kick-started mortgage markets in recent years. And falling real interest rates coupled with increasing household wealth have paved the way for increasing demand in housing finance products. While the penetration of mortgage lending activities in Croatia has already outpaced that in the CEE countries, mortgage lending in the other SEE countries only started some years ago. Low mortgage loan-to-GDP ratios show that mortgage markets are still underdeveloped but also indicate the large growth potential in this market. While in the CEE countries mortgage loan-to-GDP ratios reach double-digit levels (see Figure 10), in the SEE countries, other than Croatia, they only amount to 2% to 6%. The expansion of mortgage loans will be further enhanced by the rising quality and increasing value of real estate, and also by further improvements in mortgage finance.



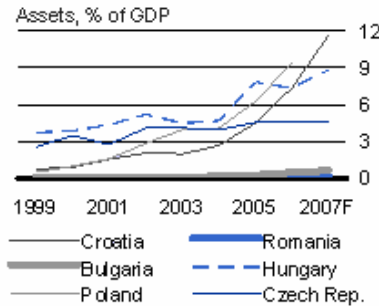
Source: National Central Banks, DB Research

Fig. 10. Mortgage markets slowly catching up

<sup>1</sup> Amann, Wolfgang (2005). How to Boost Rental Housing Construction in CEE/SEE Countries. Housing Finance International. December 2005.

### The Next Wave: Investment Funds and Old-Age Provisioning Products

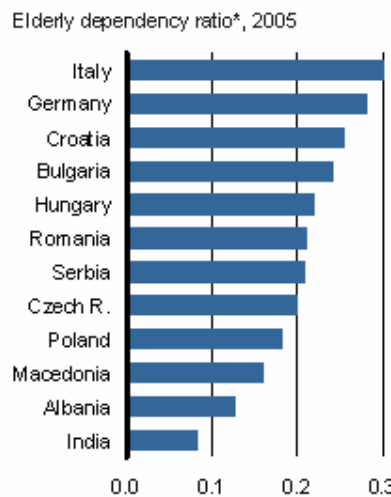
With rising wealth, the structure of household savings gradually shifts from deposits towards investment funds. This diversification of assets could already be observed in the CEE countries, where investment fund holdings rose to 5% to 9% of GDP in 2006 (see Figure 11). SEE customers are also expected to increasingly allocate their assets into more sophisticated products like investment funds over the coming years, which will enable them to pursue their own investment strategies.



Sources: FSC, UNOPC, HANFA, BAMOZS, AFMCR, IZFA.

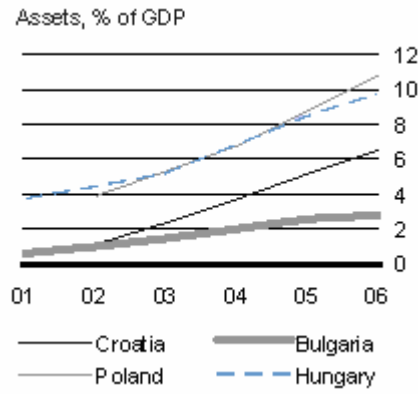
Fig.11. Rising investment funds industry

An additional catalyst for the investment fund industry and especially products for old-age provisioning is demographic change. SEE countries are facing nearly Western European population structures, where only four working-age persons have to finance one elderly dependant (see Figure 12). Such population structures rendered the pay-as-you-go systems unsustainable and led to the introduction of mandatory, privately managed, fully-funded pension schemes in a number of countries (Croatia and Bulgaria in 2002, Macedonia in 2006, Romania to be implemented in 2008). While the mandatory second-pillar pension funds are already growing rapidly (see Figure 13), voluntary (i.e. third-pillar) old-age provisioning will also contribute to increasing demand for investment funds. This will especially be the case in those countries where second pillars of retirement provision have not been introduced yet.



\*Elderly dependents per working-age person.  
Source: WDI, DB Research

Fig. 12. Population structures resemble Western Europe's

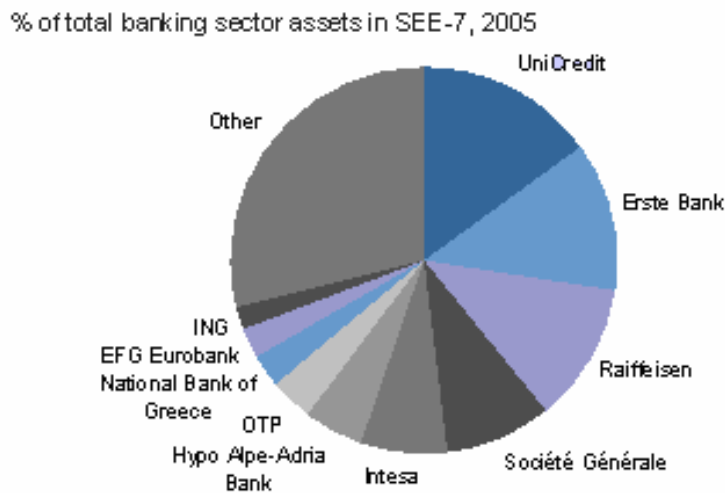


Sources: HANFA, FSC, KNUIFE, HFSA, MAPAS, DB Research.

Fig. 13. Second-pillar pension funds growing rapidly

### Most Banks in SEE are Foreign-Owned

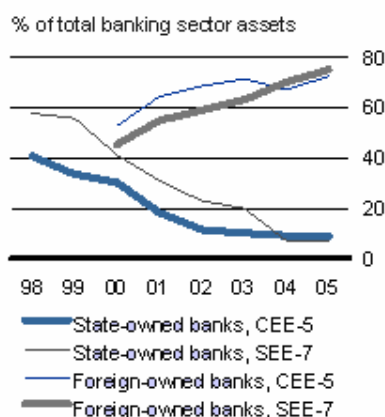
Also in terms of ownership transformation, SEE banks have taken the same road as CEE banks. With 75% of banking sector assets owned by foreign banks and only 7% of assets remaining in state hands (see Figure 15), the SEE have even outpaced their CEE peers. Among the foreign players, Austrian and Italian banks dominate (see Figure 14)<sup>1</sup>.



Source: Raiffeisen International.

Fig. 14. Italians and Austrians are the dominating foreign players

<sup>1</sup> Raiffeisen Zentralbank AG (2006). As good as it gets.... CEE Banking Sector Report. September 2006.



Sources: EBRD, DB Research.

Fig. 15. Most banks are private, foreign-owned

The privatisation of the Romanian CEC (which accounts for 1-2% of total SEE banking assets) has been postponed until at least 2009 and Serbian Komercijalna Banka (1% of total SEE assets) is expected to remain in state ownership. Only some smaller Serbian banks are likely to be privatised over the course of the next two years. As such, only M&A activity (like Bayern LB's recent acquisition of a majority stake in Hypo Alpe-Adria) or cooperation agreements (like the recent one between Raiffeisen and Lazard) will be able to shift the competitive position of the main foreign players in the coming years.

Strong foreign ownership of a banking sector is generally seen as an important mitigating factor against banking sector distress. This is due to usually solid risk management practices of the foreign players and the likelihood of recapitalisation through the parent banks in the event of a crisis. The relatively big exposure of the main Austrian banks to SEE banks (9% of total assets for Erste Bank, 32% for Raiffeisen and 19% for Hypo Alpe-Adria<sup>1</sup>) raises the question whether potential recapitalisation costs could prove too onerous for parent banks. Stress tests by the Austrian National Bank show that the Austrian banking system would still perform well under Eastern Europe credit risk stress<sup>2</sup>.

### Rampant real private sector credit growth: jeopardising macroeconomic and financial stability?

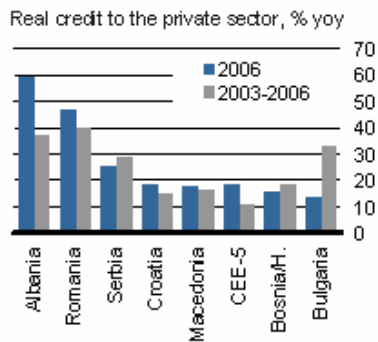
As mentioned above, real credit to the private sector has been growing rapidly in SEE countries over the last couple of years (see Figure 16). With around 50% real credit growth, Albania and Romania claim the top spots in our ranking of credit boomers in 2006. At the same time, comparatively low private sector credit-to-GDP ratios beg the question whether countries are just undergoing a normal catch-up process. To find out, we estimated "equilibrium levels" for credit-to-GDP using economic fundamentals like GDP per capita in PPP and real interest rates as determining factors and the euro area as a benchmark (see excursus in the Appendix)<sup>3</sup>. Our results show that, with the exception of Croatia, SEE credit-to-GDP ratios are below equilibrium levels and, as such they seem to be undergoing a catch-up process. Still, growth rates of over 40% yoy such as in Albania and Romania raise concerns about possible threats to macroeconomic and financial stabil-

<sup>1</sup> Total bank assets in SEE in % of total bank assets from respective website.

<sup>2</sup> Michael Boss et al. (2007). Stress Testing the Exposure of Austrian Banks in Central and Eastern Europe. OENB.

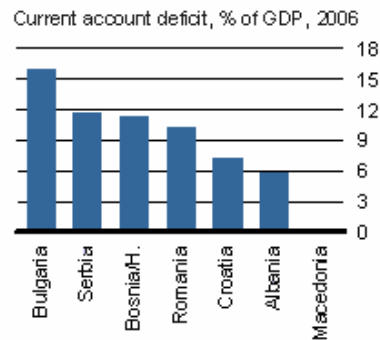
<sup>3</sup> On other determining factors see Peter Backé, and Tina Zumer (2005). Developments in Credit to the Private Sector in Central and Eastern European EU Member States: Emerging from Financial Repression – A Comparative Overview. OENB.

ity. These could manifest themselves as unsustainable domestic demand growth (i.e. overheating), ballooning current account deficits (see Figure 17) and deteriorating banking sector health. While financial deepening is clearly welcome, intense monitoring and the choice of adequate policy responses are crucial to avoid problematic boom-and-bust cycles.



Sources: IFS, DB Research.

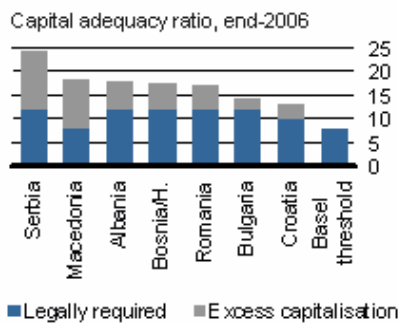
Fig. 16. Real credit to the private sector



Sources: IMF, EIU, DB Research.

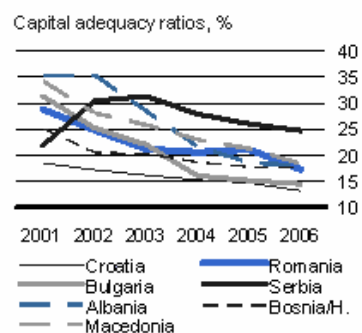
Fig. 17. Current account deficit

How sound are SEE banking sectors currently? To ensure sufficient capitalisation, banks in all countries apart from Macedonia are required to maintain capital adequacy ratios above the internationally common 8% recommended by the Basel Committee (see Figure 18). While rapid credit growth will continue to lower capital adequacy ratios (see Figure 19), the banks are expected to continue to meet the minimum capital requirements. Moreover, with the exception of Macedonia and Serbia, where the level of non-performing loans remains high at 11% and 8%, respectively, asset quality is relatively good (see Figure 20). Regulations for loan classification and provisioning are in force and they have been tightened in several countries in the last few years to prevent a deterioration in loan portfolio quality. Nevertheless, as the level of NPL is a lagging credit quality indicator, credit risk may still be on the rise. The establishment of credit bureaux in all countries (in Albania planned for the end of this year) has improved borrower screening capacities of banks. However, unhedged foreign-currency borrowing by households remains a key risk. A marked depreciation of the local currency could seriously threaten the loan servicing capacity of households. This is because, unlike corporates, households do not have income streams in FX. On the other hand, significant FX deposits in the banking system may indicate that at least some households could be less exposed to local currency weakness (see Figure 21).



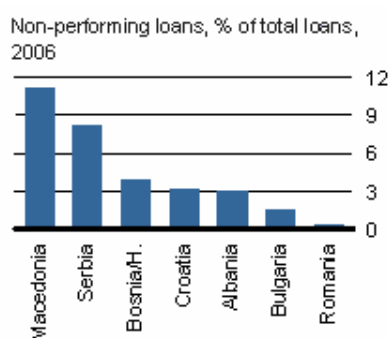
Sources: National Central Banks, DB Research.

Fig. 18. Capital adequacy ratios, end-2006



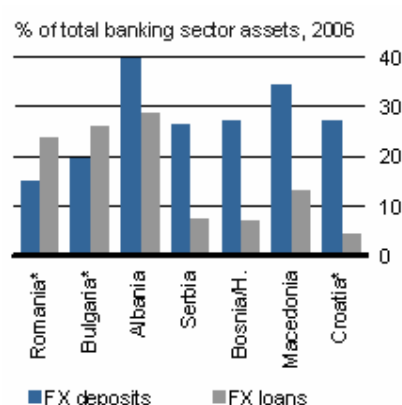
Sources: National Central Banks, DB Research.

Fig. 19. Capital adequacy ratios



Sources: National Central Banks, DB Research.

Fig. 120. Non-performing loans



\*Q1 2007.

Sources: National Central Banks.

Fig. 21. % of total banking sector assets

## Central Banks are Well Aware of Risks and Have Strengthened Prudential Regulations

In light of the risks associated with rapid growth and a significant banking sector “euroisation” (i.e. significant proportion of euro-denominated loans and deposits) several central banks in SEE have decided to tighten regulatory and prudential norms.

Based on IMF recommendations, the National Bank of **Albania** strengthened prudential regulation and bank supervision in the course of 2006. These steps helped to ease the rate of real credit growth from 70% in January 2006 to 50% at the end of last year. However, banks’ ability to monitor and assess risk properly is likely to be overstrained.

In **Romania**, despite the high share of FX loans in total household loans (above 40%), in November last year the central bank decided to remove the threshold (300% of bank capital) for lending in foreign currency (adopted in Sept. 2005) due to its ineffectiveness. Many banks had circumvented restrictions by shifting loan portfolios to the parent banks abroad. In a move towards a more advanced regulatory approach the central bank is making a shift in favour of self-regulation, according to the advisor to the BNR governor. Each bank now has to establish internal credit risk regulations with respect to individual borrowers, which have to be approved by the supervision department.

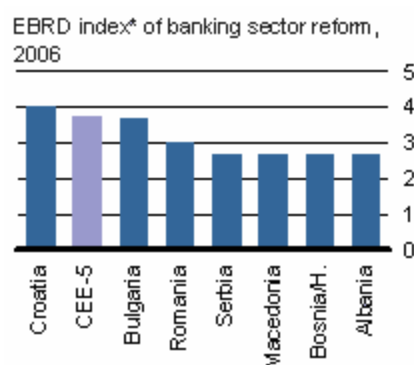
After having abolished credit restrictions in January, the central bank of **Bulgaria** announced in mid-July an increase in the minimum reserve requirement by 4 pps to 12% due to an acceleration in nominal lending growth to nearly 50% yoy. Moreover, it declared that it would take further measures (e.g. raising the capital adequacy requirement) if lending growth did not slow down.

In **Croatia**, the central bank also strengthened its lending regulations in July. Lending by individual banks will be allowed up to a maximum of 12% per year and 0.5% per month. If lending growth exceeds this threshold, banks are required to purchase government paper for half of the amount in excess of the threshold.

In **Serbia**, the central bank last year introduced a ceiling to household lending at twice the bank’s core capital. In January 2007 it replaced the 60% reserve requirement ratio on short-term external borrowing with a uniform 45% ratio applied to all foreign-currency deposits and external borrowing, as well as dinar deposits indexed to foreign currency.

## Legal frameworks have improved strongly

At the beginning of the 1990s two-tier banking systems were introduced in all SEE countries, separating central and commercial banking activities. Over the last couple of years strong efforts have been made to bring the legal and regulatory framework in line with EU directives and the Basel Core Principles for Effective Banking Supervision. The latest comprehensive survey, conducted by the EBRD in 2005 to benchmark the SEE countries banking legislation against the Basel Principles showed that Romania, Bosnia and Herzegovina, Bulgaria and Croatia have the highest compliance scores in the region<sup>1</sup>. Albania also scored quite well, while significant shortfalls remained in Serbia and Macedonia. Since then the adoption of a new banking law in Serbia in November 2005 has aligned key regulatory matters with the Basel Principles<sup>2</sup>. In Albania, a new law aimed at consolidating the legal framework for bank supervision and strengthening existing regulation was approved in July 2006<sup>3</sup>. In Macedonia, the legal framework has also been improved especially with regard to prudential regulations and ownership structures, but implementation is still lagging<sup>4</sup>. The latest EBRD index of banking sector reforms, which includes not only the quality of banking laws and regulations, but also the level of financial deepening, shows that, apart from Croatia, the SEE countries still lag the average score of CEE countries (see Figure 22. Most of them are classified as “showing substantial progress in establishment of bank solvency and of a framework for prudential supervision and regulation”<sup>5</sup>. This is one notch below the best score which would indicate full compliance with BIS standards.



\* Range from 1 (establishment of two-tier system) to 4 (banking laws and regulations close to BIS standards). Sources: EBRD, DB Research.

Fig. 22 EBRD index of banking sector reform

## Conclusion

In this study we have shown that the degree of financial intermediation in the SEE countries is still below equilibrium levels but converging fast. Underpinned by a favourable macroeconomic environment and rising per-capita incomes, we forecast banking sector assets (in EUR terms) to grow on average 17% p.a. until 2011. Following the path of the CEE countries, the retail sector is expected to be the main engine of growth, with mortgage loans and investment funds becoming the most dynamic fields of business. While rapid credit growth (especially in FX) poses a risk for financial stability, strong foreign ownership, sufficient capitalisation, still benign levels of non-

<sup>1</sup> Gian Piero Cigna (2005). The quality of banking legislation in transition countries, EBRD, October 2005.

<sup>2</sup> IMF. Article IV report on Serbia. October 2006.

<sup>3</sup> EBRD. Transition Report 2006.

<sup>4</sup> IMF. Article IV report on the Former Yugoslav Republic of Macedonia. October 2006.

<sup>5</sup> EBRD. Transition Report 2006, p. 199.

performing loans and prudential and regulatory tightening measures by the central banks mitigate this risk. The SEE banking sectors are definitely moving into the spotlight!

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## Appendix

### Determining the equilibrium level of private sector credit

Following the methodology of Schadler et al. (2004) we estimate a model of credit to the private sector in the euro area using a vector error correction model (VECM). We then apply this model to SEE countries to derive equilibrium credit-to-GDP ratios. As (demand-side) factors determining the ratio of bank credit to GDP (CREDITRATIO) we choose the log of GDP per capita measured in US dollar in PPP (LNGDP) to capture current income levels and real short-term interest rates (RSTI) as the cost of credit. The estimation is carried out on the basis of quarterly data from 1995:4 to 2006:4.

The underlying theory for VECMs is that, according to the Granger representation theorem, a vector  $\vec{Y}_t$  of  $n$  potentially endogenous I(1) variables can be modelled as an unrestricted vector autoregression.

$$\vec{Y}_t = \delta + \Theta_1 \vec{Y}_{t-1} + \dots + \Theta_p \vec{Y}_{t-p} + \varepsilon_t$$

This equation can be reformulated to:

$$\Delta \vec{Y}_t = \delta + \Gamma_1 \Delta \vec{Y}_{t-1} + \dots + \Gamma_{p-1} \Delta \vec{Y}_{t-p+1} + \Pi \vec{Y}_{t-1} + \varepsilon_t,$$

where the long-run matrix

$$\Pi \equiv -\Theta(1) = -(I_k - \Theta_1 - \dots - \Theta_p)$$

determines the long-run dynamic properties of  $\vec{Y}_t$ .

At the first stage the underlying data were tested for the presence of a unit root. The unit root hypothesis for all three variables could not be rejected for the levels, but for the first differences of the individual variables, indicating that all variables are I(1). Using the Johansen cointegration test we identify two cointegrating relations, namely one with and one without an intercept. The preferred specification in terms of significance of the test results is the one without intercept. The normalised cointegrating relation has the following form (t-statistic in parentheses):

$$\text{CREDITRATIO} = 34,34 * \text{LNGDP} - 3,28 * \text{RSTI},$$

(-12.8671)      (2.51066)

This indicates a positive relationship between per-capita-GDP and the credit-to-GDP ratio as well as a negative one between the real rate of interest and the credit-to-GDP ratio. The adjustment coefficients (with their associated t-statistic in parentheses) have a negative sign and are significant (except rsti), ensuring convergence to the long-run equilibrium.

Error Correction:	D(CREDITRATIO)	D(LNGDP)	D(RSTI)
CointEq1	-0.028533	-0.000328	0.011611
t-statistics	(-2.49141)	(-3.01731)	(1.01783)

On the basis of the above described cointegrating relation we calculate the estimated equilibrium credit-to-GDP ratios for the South Eastern European countries (see Figures below).

