THE GLOBAL FINANCIAL CRISIS AND FISCAL POLICY IN CENTRAL AND EASTERN EUROPE: THE 2009 CROATIAN BUDGET ODYSSEY

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Abstract

This paper addresses two main questions: first, what is the scope for domestic and external market-based financing of Croatia’s government budget deficit; and second, what is the scope for expansionary fiscal policy in Croatia. Both questions are addressed from a broader Central and Eastern European perspective, in the context of the economic and financial crisis unfolding in the region since October 2008. The paper analyses how the crisis had spread through financial markets in the region and how it affected the cost and availability of budget financing. It shows that the reliance on market-based financing increased significantly in successive revisions of the 2009 budget despite rising bond yields and interest rates; that government borrowing from domestic banks led to a severe crowding-out of the private sector; and that the sovereign eurobond placement in 2009 was costlier than earlier placements in similar circumstances and other sovereign debt issues in CEE in the first half of 2009. On this basis, the paper argues that expansionary fiscal policy in Croatia would not be effective and would undermine fiscal sustainability and financial stability.

Keywords: financial crisis; capital flows; BIS international financial statistics; Central and Eastern Europe; fiscal policy; Croatian budget

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1 Introduction

This paper addresses two main questions: first, what is the scope for domestic and external market-based financing of Croatia’s government budget deficits; and second, what is the scope for expansionary fiscal policy in Croatia. Both questions are addressed from a broader Central and Eastern European (CEE) perspective, in the context of the economic and financial crisis unfolding in the region since October 2008. The paper analyses financing plans in different revisions of the 2009 budget and shows that these plans took little account of financial market developments. On this basis, it argues that expansionary fiscal policy would not be effective and would undermine fiscal sustainability and financial stability.

Government expenditure in Croatia is financed for the most part with taxes (60% of total revenue in 2008), social security contributions (35%) and other revenues (5%). By far the most important taxes are those on goods and services – the VAT and excises account for almost 70% of the total tax revenue. Total revenue accounted for roughly 40% of GDP in 2008, one of the highest revenue-to-GDP ratios in Central and Eastern Europe.

General government deficit on a cash basis averaged -4.2% of GDP over 1999-2008. The deficit peaked at -6.5% of GDP in 2000, and thereafter declined more or less continuously to -1.8% of GDP in 2008. Budgetary data based on the European System of Accounts (ESA 95) are available from 2004 only; the deficit on this basis averaged -2.0% of GDP and declined from -3.4% of GDP in 2004 to -0.7% of GDP in 2008.1

The budget deficit in Croatia is usually financed from a combination of domestic and external sources.2 On the domestic side, bank loans and domestic currency bonds are generally used in roughly equal proportions; on the external side, bank loans prevail, with international bonds being issued rarely and irregularly.

Given this structure of budget revenues and deficit financing, one could have expected the global financial crisis to have the following effects on the Croatian budget. First, tax revenues would fall, because the economy and in particular consumption would grow more slowly. Second, revenue from social security contributions would fall, although perhaps to a smaller extent than tax revenues, given that labour markets typically adjust with some delay. Third, the cost of external financing would rise. Fourth, the sources of external financing would evaporate as global investors become more risk averse and have less funds to invest in emerging market assets such as Croatian government debt. Fifth, with spillovers from the global capital markets, the cost of domestic financing would also rise and its availability fall.

In summary, in the autumn of 2008, when the budget for 2009 was prepared, the evolving crisis should have led Croatian fiscal planners to extreme caution in projecting tax revenues and sources of external and domestic financing. Instead, the 2009 budget was built on optimistic assumptions of economic growth and tax revenues; increased borrowing from domestic banks at a time when the private sector started facing the credit crunch; and a re-

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1 The cash deficit averaged -2.8% of GDP over the period 2004-2008, ie 0.8% higher than the ESA 95 deficit.
2 The paper discusses only market-based, private sources of financing: bank loans, treasury bills and local currency bonds on the domestic side; and bank loans and international bonds on the external side. Official and concessionary (ie, non-market based) sources of financing are not considered.
turn to the international bond market just at the time when external financing conditions had turned from being historically extremely favourable to being extremely unfavourable.

These issues have not yet been discussed in the literature on fiscal policy in Croatia, so the present paper tries to fill this void. In particular, unlike studies of budget revenue and expenditure, there have been no major studies of the way Croatian budget deficits are financed. A pioneering study is Bajo (2005), who analysed cash and liquidity management by the Ministry of Finance. He found that because of poorly developed treasury function, the government kept a large part of its liquid funds as deposits in commercial banks instead of placing these funds in the money market. Even more bizarrely, the Ministry of Finance frequently borrowed at market terms from the commercial banks where it held deposits (including the state-owned Croatian Postal Bank), in order to cover short-term deficits of budgetary and extra-budgetary units.

Another related study is Švaljek (2009), who reviewed budget revenue and expenditure forecasts as well as their accuracy. For the budgets from 1995 to 2008, she found that errors in revenue and expenditure forecasts were relatively small, and that the accuracy of forecasts was higher for budget revisions than for original government budgets. In general, the original budgets underestimated, whereas the revised budgets overestimated revenues. The reasons seemed to be precaution caused by a significant uncertainty entailed in revenue forecasting, but also the strategic use of forecasts by the government in order to prevent the excessive growth of expenditure. As argued in the present paper, the 2009 budget would have been a major exception to this pattern.

Section 2 sets the scene with an overview of repeated attempts to secure domestic financing for the 2009 budget. Section 3 analyses in more detail how the global financial crisis spread to CEE and Croatia; how it affected the cost and availability of external sources of budget financing; and what impact this had – or rather did not have – on successive deficit financing plans. Against this background, Section 4 discusses why Croatia cannot pursue expansionary fiscal policy. It first analyses how macroeconomic policy coordination was conducted during the latest crisis and then develops theoretical and empirical arguments against fiscal expansion in the current circumstances. Section 5 concludes with a discussion of key fiscal reforms necessary to avoid similar, unnecessary and expensive budgetary wanderings in the future.

2 The domestic financing constraint: three revisions and counting

The starting point for our analysis is March 2008, when the Croatian parliament belatedly adopted the budget for 2008, and the end point is August 2009, when the government revised the 2009 budget for the third time. In the spring of 2008 Croatia, like the rest of Central and Eastern Europe (CEE), was still spared the more serious spillovers from the financial turmoil in US and European financial markets. Growth was relatively strong and the main policy concern was inflation, which accelerated sharply due to the pick-up in food and oil prices and tight labour markets. The budget for 2008 envisaged a reduction in the general government deficit to 2.3% of GDP from 2.6% in 2007. This gradual reduction was widely viewed as appropriate. There were a few analysts advocating a sharper reduction, but many commentators and politicians were also calling for an increase in
the deficit, arguing that the budget was not “developmental” enough. No one seemed to have noticed clear signs of tightening that were emerging in global financial markets at that time.

Three months after the original budget was approved the government adopted a revised budget for 2008 based on a new methodology for recording government transactions harmonised with EU standards (i.e., European System of Accounts, ESA 95). This made comparisons with budgets for previous years difficult, and thus allowed an increase in overall spending while keeping the reduction in the headline deficit unchanged at 0.3% of GDP. Namely, according to the ESA 95 methodology, the 2008 general government deficit was projected at 1.3% of GDP, down from 1.6% of GDP estimated at the time for 2007, even though the revised budget introduced higher spending on health care and new subsidies for households and businesses hit by food and energy price increases.

During the second half of 2008 the budget was largely outside the media attention. Data indicated that revenue collection in the first half of the year was strong, which made it easier to quieten concerns expressed by some analysts over an unusual, 24% increase in subsidies and current and capital transfers (EIZ, 2008). Moreover, the baseline scenario of an orderly slowdown in emerging markets played out fairly closely through September 2008.

But starting in October 2008 the CEE region got increasingly sucked into the global financial and economic maelstrom. As credit markets around the globe became dysfunctional in the aftermath of the collapse of Lehman Brothers, there was heavy and at times indiscriminate selling of emerging market assets.3 CEE was hit particularly hard because it had financed its long expansion to a great extent by foreign borrowing.

This time the financial market tremors started to affect fiscal outcomes and policy in Croatia fairly quickly. Data for the third quarter indicated a sharp slowdown in revenue collection (from 8.1% in the second quarter, to 2.4% in the third). However, general government expenditure remained strong, growing 8% year-on-year in the third quarter (compared with 6.8% in the second quarter). The Ministry of Finance resorted to very frequent and large T-bill issuances in the last quarter of 2008 and January 2009, suggesting that it started to face liquidity problems (EIZ, 2009d).

2.1 The original budget

Against this background, the government initially proposed to reduce the budget deficit for 2009 to zero. However, the debate on this proposal turned out to be more intense than expected, involving social and coalition partners, economists, as well as government and parliament members. The most controversial topics were the public sector wage increase and the health system reform (Ott, 2008). The public sector trade unions opposed vehemently any limitation of the previously agreed 6% wage increase. And as in 2008, many politicians and commentators were still advocating an increase in the budget deficit (Šajatović, 2008), despite the clear signs that the crisis had worsened. The arguments for fiscal expansion ranged from oversimplified Keynesian thinking to naïve imitation

3 Investment bank Lehman Brothers was one of the most important counterparties on global swap and derivatives markets, which are essential for normal functioning of traditional securities markets. Its default therefore triggered widespread disruptions in global financial markets.
(“All advanced economies are doing it”). In the end, the government decided not to break the collective agreement with the public sector trade unions for the sake of “social peace”. The 2009 budget thus envisaged a general government deficit of -0.8% of GDP, with both revenue and expenditure projected to increase by 7.3% (Table 1).

Table 1 Croatia: Consolidated general government finances, 2008-2009 (in billions of kuna)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>2008 Original plan December 08</th>
<th>2009 Revision I April 09</th>
<th>2009 Revision II July 09</th>
<th>2009 Revision III August 09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total revenue</td>
<td>116.1</td>
<td>124.6</td>
<td>116.6</td>
<td>109.8</td>
</tr>
<tr>
<td>Total expenditure</td>
<td>118.4</td>
<td>127.0</td>
<td>121.6</td>
<td>120.8</td>
</tr>
<tr>
<td>Deficit</td>
<td>-2.3</td>
<td>-2.4</td>
<td>-5.0</td>
<td>-11.0</td>
</tr>
<tr>
<td>In percent of GDP</td>
<td>-0.7</td>
<td>-0.8</td>
<td>-1.6</td>
<td>-3.4</td>
</tr>
<tr>
<td>Net financing</td>
<td>2.3</td>
<td>2.4</td>
<td>5.0</td>
<td>11.0</td>
</tr>
<tr>
<td>Domestic&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.8</td>
<td>2.9</td>
<td>5.5</td>
<td>9.4</td>
</tr>
<tr>
<td>External&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-0.5</td>
<td>0.0</td>
<td>0.0</td>
<td>2.5</td>
</tr>
<tr>
<td>Other</td>
<td>-1.1</td>
<td>-0.5</td>
<td>-0.5</td>
<td>-0.9</td>
</tr>
</tbody>
</table>

<sup>a</sup> Includes domestic bank loans, bonds and treasury bills.

<sup>b</sup> Includes loans from international financial institutions and foreign governments; and international bonds.

Source: Ministry of Finance.

But the criticism of yet another postponement of fiscal adjustment did not subside. Nor did real economy and financial market prospects get any better. On the contrary, in January and February 2009 it became clear that the state of the real economy was deteriorating much faster than anyone had anticipated. In December 2008 the consensus forecast for growth in Croatia in 2009 was 1.8%; by March 2009 the forecast was that output growth would turn negative (-1.9%) (Consensus Economics, 2009). In mid-February, financial markets in the CEE region were close to a panic mood and many borrowers, including governments, became aware that they might run into difficulties with repaying or rolling over their debt. The long-standing vulnerabilities were suddenly exposed in a much grimmer light than at any time since the Russian crisis of 1998.

2.2 The first budget revision

At that point, the Croatian authorities seem to have finally acknowledged what some analysts had been arguing all along – that either expenditure had to be cut or taxes increased (Ott, 2009b; EIZ, 2009c). Accordingly, they started to revise the 2009 budget and in late March they sent a draft of the revisions to the parliament. The revised budget en-
visaged 6.4% lower revenue and 4.3% lower expenditure compared to the budget adopted in December 2008. Due to lower projected revenue and GDP, and sharper reduction in revenue than in expenditure, it was estimated that the deficit would double to 5 billion kuna (1.6% of GDP) (Table 1).

Unlike the original budget, the government planned to finance the deficit in the revised budget with an international rather than domestic bond issue, domestic treasury bills and greater borrowing from both domestic and foreign banks (Table 2). As discussed in the next section, the rationale for this financing plan is far from clear in light of the financial crisis worsening in CEE at the time.

Using a temporary window of opportunity, the government turned to the international debt market in late May 2009, issuing a €750 million Eurobond with a coupon set at 6.50% and a maturity in January 2015. The authorities considered this bond issuance as successful, but the cost of new debt was relatively high compared to other CEE countries issuing debt in the first half of 2009 and compared to the Croatian debt issued in the past (discussed below).

In the event, the relief brought by the return to the Eurobond market was short-lived. Already in June it was clear that key assumptions behind the revised budget were unrealistic. A sharp fall in revenue that had started in late 2008 deepened in 2009. With GDP declining by 6.7% year-on-year in the first quarter, revenues from the VAT and excises fell by 19% year-on-year, and revenues from the profit tax fell by 11%. In contrast, general government expenditure continued to expand, rising 10.7% year-on-year in the first quarter.5

2.3 The second and the third budget revisions

Following an unexpected resignation of the prime minister at the end of June, the new government revised the budget twice in July, with a further revision announced for the autumn. In the second budget revision, the deficit rose to 11 billion kuna (3.4% of GDP, Table 1), as the government recognised that revenue would fall much more sharply than previously envisaged. However, the government made no noteworthy expenditure cuts: total spending was reduced by only 0.8 billion kuna, with 2.2 billion kuna in spending merely redistributed among different budget items.

Unlike in late 2008, when the financing gap was filled by issuing treasury bills, in the first half of 2009 the government turned to banks for deficit financing. As a result, total borrowing of the central government from domestic banks increased 49% in the first five months of 2009. This led to a very severe crowding-out of the private sector: in the first five months of 2009, total bank lending to the government increased by almost 10 billion kuna, compared to 8 billion kuna in whole of 2008 (Graph 1). At the same time, total bank lending to households decreased by 1.8 billion kuna (against an increase of over 13 billion kuna in 2008), and lending to non-financial corporations increased by less than a billion kuna (vs. an increase of more than 10 billion kuna in 2008).

5 The rising expenditure partly resulted from pay-off of public sector arrears accumulated at the end of 2008, and partly from increased spending ahead of local elections in May 2009. Interestingly, social security contributions increased 11% in Q1:2009, as total employment continued to expand despite sharp contraction of the economy.
Table 2 Financing of the budget deficit, 2008-2009 (in billions of kuna)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Original plan</td>
<td>December 08</td>
</tr>
<tr>
<td>Net financing</td>
<td>2.3</td>
<td>2.4</td>
</tr>
<tr>
<td>Disbursements (gross)</td>
<td>11.2</td>
<td>12.8</td>
</tr>
<tr>
<td>Domestic</td>
<td>9.0</td>
<td>6.4</td>
</tr>
<tr>
<td>Bonds</td>
<td>3.5</td>
<td>4.8</td>
</tr>
<tr>
<td>T-bills</td>
<td>0.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Loans</td>
<td>5.5</td>
<td>1.6</td>
</tr>
<tr>
<td>Foreign</td>
<td>2.1</td>
<td>6.4</td>
</tr>
<tr>
<td>Bonds</td>
<td>0.0</td>
<td>5.5</td>
</tr>
<tr>
<td>Loans</td>
<td>2.1</td>
<td>0.9</td>
</tr>
<tr>
<td>Amortisation (gross)</td>
<td>7.8</td>
<td>9.8</td>
</tr>
<tr>
<td>Domestic</td>
<td>5.2</td>
<td>3.5</td>
</tr>
<tr>
<td>Bonds</td>
<td>3.0</td>
<td>0.3</td>
</tr>
<tr>
<td>T-bills</td>
<td>0.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Loans</td>
<td>1.4</td>
<td>3.2</td>
</tr>
<tr>
<td>Foreign</td>
<td>2.6</td>
<td>6.3</td>
</tr>
<tr>
<td>Bonds</td>
<td>1.3</td>
<td>5.0</td>
</tr>
<tr>
<td>Loans</td>
<td>1.3</td>
<td>1.4</td>
</tr>
<tr>
<td>Other financing (net)</td>
<td>-1.1</td>
<td>-0.5</td>
</tr>
</tbody>
</table>

*Net financing equals the budget deficit and is given by the sum of gross disbursements, minus gross amortisation, plus net other financing.*

\( ^a \) Bonds issued in domestic markets (denominated in kuna and foreign currencies).

\( ^b \)-loans received from domestic banks and other financial institutions.

\( ^c \) Loans issued in international markets.

\( ^d \) Loans received from international organisations, foreign governments, foreign banks and other foreign financial institutions.

\( ^e \) Repayments of principal on bonds issued in domestic markets.

\( ^f \) Repayments of principal on treasury bills issued in domestic markets.

\( ^g \) Repayments of principal on loans received from domestic banks and other financial institutions.

\( ^h \) Repayments of principal on bonds issued in international markets.

\( ^i \) Repayments of principal on loans received from international organisations, foreign governments, foreign banks and other foreign financial institutions.

Source: Ministry of Finance (http://www.mfin.hr/hr/rebalans-proracuna-2009).

As a consequence of crowding-out by the government, the private sector had to withdraw deposits in banks to be able to finance its maturing obligations: by May 2009 demand deposits of the consolidated banking system decreased almost 20% from their end-2008 level. As currency in circulation stayed more or less constant, money aggregate M1
was 14% lower in May 2009 compared to December 2008.\textsuperscript{6} This significant liquidity squeeze, generated endogenously by the private sector in reaction to the government’s decision to borrow from domestic banks, had offset to a considerable degree the central bank’s monetary easing (see Section 4).

Graph 1 Domestic bank lending by institutional sectors (in billions of kuna)

\begin{center}
\begin{tabular}{c|c|c|c|c|c|c|c}
& 2008 & January-May 2009 \\

central and local government & 7.9 & 9.8 \\
household & 13.6 & -1.6 \\
non-financial corporate & 10.6 & 0.9 \\
financial institutions & -0.1 & -4.0 \\
\end{tabular}
\end{center}

\textit{Source: CNB}

Despite evidence of crowding-out, the government planned to increase bank financing in the second budget revision by further 3 billion kuna (Table 2). It also planned to increase issuance of treasury bills (by 1 billion kuna) and of international bonds (by 2.5 billion kuna).

This financing plan was, however, untenable. Together with the government’s unwillingness to cut expenditure, another budget revision became unavoidable. The main features of the third budget revision, passed within two weeks of the second one, were a rise in the VAT rate from 22% to 23%; the introduction of a “crisis surcharge” on personal incomes above 3,000 kuna per month; and the introduction of an excise tax on mobile telephony (EIZ, 2009a). These tax hikes were expected to raise a total of 1.2 billion kuna in 2009 (Table 1). The expenditure side of the budget was left more or less unchanged, so the deficit was projected to fall marginally, to 9.3 billion kuna (2.9% of GDP). The only larger change in financing was a 2.4 billion kuna decrease in borrowing from domestic banks (Table 2).

2.4 Towards the fourth budget revision

At this writing it is not possible to assess how the final budget for 2009 will look. On the expenditure side, the new government announced shortly after taking office in early July that it would postpone more significant spending cuts for the autumn of 2009. Whether the government will have the political courage and the backing in parliament to make

\textsuperscript{6} I am grateful to an anonymous referee for bringing this development to my attention.
the necessary cuts remains to be seen. On the revenue side, there is widespread scepticism about the effectiveness of the tax increases (see Ott, 2009a; Švaljek, 2009b; Urban, 2009), not to mention more than 300 legal challenges of the tax increases filed before the Constitutional Court.

How the higher budget deficits will be financed is also far from clear. The discussion above highlighted problems with domestic bank financing. But conditions have also tightened in the domestic bond market. The high degree of uncertainty about the government’s ability to secure funding led to a sharp increase in long-term interest rates (Graph 2) and market prices for protecting against defaults (ie, CDS spreads) (see below). Croatia is in the group of countries including the Baltic states, Bulgaria and Hungary, for which the long-term rates increased particularly sharply over the past year and a half. As discussed in Section 3, these are the “usual suspects” when it comes to external vulnerabilities in the region. Reflecting their increased vulnerability, sovereign credit ratings of the Baltic states and Hungary, as well as Croatia for domestic currency debt, were lowered after October 2008.

**Graph 2 Long-term domestic interest rates**

![Graph showing long-term domestic interest rates](image)

*Long-term domestic currency government bond yields; the horizontal lines refer to the 10-year German benchmark bond; end-of-period observations; in per cent.*

*Note: BG = Bulgaria; CZ = Czech Republic; HR = Croatia; HU = Hungary; LT = Lithuania; LV = Latvia; PL = Poland; SI = Slovenia; SK = Slovakia.*

*Sources: Datastream; ECB; national data.*

### 3 The external financing constraint

The global financial crisis began in the main financial centres in August 2007. For over a year it had only a moderate impact on CEE. Since October 2008, however, CEE has become the emerging market region hardest hit by the crisis. This section analyses how the crisis had spread to CEE and Croatia, and how it affected the cost (ie asset prices) and availability (ie capital inflows) of external financing. The main finding is that despite many clear signs that external sources of finance were evaporating and their cost was soaring, the budget planners in Croatia decided to rely more extensively on external financing in 2009 than in the past.
3.1 Impact of the crisis on the cost of external financing

After the collapse of Lehman Brothers in mid-September 2008 the financial crisis had spread rapidly through equity, bond, foreign exchange and interbank markets in emerging market countries. The first asset market to feel the full force of the global financial crisis in CEE was the equity market. The slide in equity prices that began in mid- or late 2007 and continued at a more or less gradual pace through August 2008 turned into a veritable plunge in September and October 2008, when prices fell by 50% on average, and by close to 60% in Croatia (Graph 3, right-hand panel). By mid-February 2009, when Croatian authorities were preparing their first budget revision, CEE equities lost on average 75% from peak values realised in 2007, and were back to the levels from 2004 or earlier.

Graph 3 Equity prices

The decline in equity prices is important for budget financing because asset prices are closely linked with the business cycle and hence government revenue. In Croatia, there has been no research on this kind of relationship. However, studies for other countries invariably show a strong positive correlation both directly via tax revenues tied to capital gains and indirectly via consumption taxes tied to spending induced by wealth effects (see Poterba, 2000). It is worth noting that Croatia had experienced the greatest increase in equity prices of all CEE countries: between January 2005 and mid-October 2007 equity prices in Croatia appreciated by 316% compared to the average of 230% for other countries in the region. The plunge in equity prices in the autumn of 2008 was thus a clear warning that budget revenue could not be maintained at levels of the previous few years.

The next asset market affected by the crisis was the sovereign Eurobond market. This is a key market for financing of emerging market countries’ budget deficits, especially for small open economies with underdeveloped domestic bond markets such as Croatia. Between mid-2004 and mid-2007, conditions in the sovereign Eurobond bond market were extremely favourable for sovereign issuers from emerging markets. Due to large demand
for high-yielding assets and strong growth of the global economy, spreads on emerging market bonds over benchmark bonds such as ten-year bonds of the US or German governments reached historical lows, in the case of Croatia of less than 20 basis points in June 2007 (see below).

However, following the onset of the crisis in August 2007, spreads of widely traded central European sovereign bonds moved up, at first gradually, to 50-100 basis points by September 2008 (Graph 4, left-hand panel). But the worsening of the crisis in September and October 2008 led to a further widening of bond spreads, in many cases to levels unseen in the past. Countries with large external imbalances were affected particularly hard: their spreads jumped in parallel with escalating problems on the Hungarian forint market, in the case of Croatia, from 100 basis points in early September to 550 points at the end of December (Graph 4, left-hand panel).

Graph 4 Bond spreads for selected countries*

![Graph 4 Bond spreads for selected countries](image)

*a Spreads over benchmark euro area bonds, in basis points.

b For Latvia, 5-year bond; for Lithuania, 4-year bond; for Macedonia, 6-year bond.

Note: BG = Bulgaria; HR = Croatia; HU = Hungary; LT = Lithuania; Latvia = Latvia; MK = Macedonia; PL = Poland; RO = Romania; SK = Slovakia; TR = Turkey.

Sources: Datastream; JPMorgan Chase.

In credit insurance markets, credit default swap (CDS) spreads for sovereign bonds of highly indebted countries such as Croatia, Hungary, Romania and Turkey soared within days of the Lehman collapse, in the case of Croatia from 100 to 450 basis points in September 2008, and further to 600 points in early March 2009 (Graph 5, right-hand panel). With CDS spreads at 600 basis points, an investor buying €10 million worth of Croatian government bonds needs to pay €600,000 to insure against the risk of default on these bonds. This dramatic increase in foreign financing costs had apparently little impact on budget planning in Croatia – the initial 2009 budget, prepared around this time, envisaged a return to the Eurobond market in order to finance the projected deficit.
The turmoil in October also spread quickly to the foreign exchange markets. The collapse of Icelandic banks led to a dramatic drop in the equity price of Hungary’s OTP bank (which was viewed as vulnerable because it is not majority foreign-owned) and a collapse in foreign demand for forint-denominated government bonds. As banks were no longer prepared to exchange euros for forints in foreign currency swap markets, the forint depreciated sharply, triggering contagion effects throughout the region. The Polish zloty, for instance, depreciated by over 20% against the euro over the fourth quarter of 2008 (Graph 6, left-hand panel), despite a relatively good performance of the Polish economy. The kuna depreciated vis-à-vis the euro by about 4% between end-September 2008 and end-January 2009, but only because the Croatian National Bank intervened directly in the foreign exchange market and released foreign exchange liquidity by repealing the marginal and lowering the minimum reserve requirement on foreign borrowing by banks.  

For Croatia, like the rest of CEE, depreciation pressures came after several years of strong appreciation pressure on the kuna. Over this period, both the private and public sector in CEE had borrowed heavily in foreign currencies, taking advantage of lower interest rates abroad and the strengthening of local currencies. Now that exchange rates had reversed course, borrowers with large foreign exchange exposures suffered heavy losses. Many investors with maturing foreign currency debt were forced to raise foreign exchange by selling local currency assets, often at much depreciated prices, thus magnifying the decline in exchange rates and equity prices in very thin markets. Liquidity was drained from the interbank markets as well, with money market rates spiking occasionally at 40% in Croatia and Romania.

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* Several other CEE central banks responded by lending euros to their banks. In addition, the ECB provided euro refinancing (against high-quality collateral) to Hungary and Poland, and the Swiss National Bank extended Swiss franc/euro swap arrangements to Hungary and Poland.
The next storm that hit the CEE markets – and so far the most serious one – started in mid-February 2009, when the rating agency Moody’s (2009) warned that it might downgrade banks active in CEE because of their heavy exposure to the region. Although the report revealed no new information about the vulnerabilities of parent banks or their subsidiaries, it shook investors’ confidence. Equity prices plunged by more than 10% on average within a week (Graph 3); bond spreads soared to 500 points in Croatia and Hungary (Graph 4); currencies came under renewed pressure (Graph 6); and parent banks’ CDS spreads rose sharply.8 Taken together, these developments gave rise to widespread concerns about the imminent onset of a financial crisis in the region. Together with fears of the impact on their banking systems, these concerns have led the authorities in Bosnia and Herzegovina, Hungary, Latvia, Serbia, Romania and Ukraine to seek IMF assistance.

Although a measure of calm has returned to the local financial markets since March, it would be premature to conclude that the financial turmoil in CEE is over. One source of uncertainty is the precarious state of economy and finances in Latvia, whose currency board arrangement remains under intense pressure. If Latvia were forced to abandon its peg to the euro, other CEE countries with fixed or tightly managed exchange rate regimes, including Croatia, would probably come under intense pressure, too. In that case they

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8 The Moody’s report and the subsequent reporting in the press (especially the Financial Times and the Economist) contained errors that may have influenced market decisions. This prompted central banks of the Czech Republic, Hungary, Poland and Romania to coordinate the issuance of press statements informing the markets about the actual state of foreign bank lending in their countries; see eg http://www.cnb.cz/en/public/media_service/press_releases_cnb/2009/090224_statement_FT.html. In late February, the rating agency Standard and Poor’s (2009) issued a report that introduced somewhat greater differentiation among CEE countries. Around the same time, the Austrian National Bank clarified several key arguments behind its pan-European initiative aimed at assisting the CEE countries to avoid a crisis (OeNB, 2009).
would not only have to contend, as presently, with higher cost of external finance for some time, but might also have to get involved in crisis management. Another concern is the rise in non-performing loans in many banks in the region. Finally, many governments in CEE are confronted with much larger budget deficits and may have difficulties in securing the necessary financing. Many governments in CEE are also politically weak. Widespread discontent about government inaction or unpopular reforms may add to instability and make it even harder for some CEE countries to resolve their fiscal problems.

3.2 Impact on the availability of external financing

The movements in capital to the region have closely mirrored the movements in asset prices discussed above. The growth of international bank credit, the most important type of capital inflows to CEE, initially held up remarkably well: in the first half of 2008, when loans to other emerging market regions had already started to contract, the external loans of BIS reporting banks vis-à-vis banks and the non-bank sector in CEE were equivalent to more than 70% of the total for 2007 (Table 3).^9^

| Table 3 Cross-border financing of CEE economies^a^ (in billions of US dollars) |
|---------------------------------|---|---|---|---|---|
|                                 | 2007 | 2008 | 2009 |
|                                 | Q1  | Q2  | Q3  | Q4  | Q1  | Q2  |
| Cross-border loans^b^           |     |     |     |     |     |     |
| To banks                        | 125 | 50  | 41  | 21  | -3  | -24 |
| To the non-bank sector          | 70  | 32  | 18  | 8   | -3  | -20 |
| International debt securities^c^| 55  | 17  | 23  | 13  | 0   | -4  |
|                                 | 12  | -2  | 11  | 4   | -3  | 2   |
|                                 |     |     |     |     |     |     |

^a^ Includes 17 CEE countries listed in Appendix Tables A1 and A2.

^b^ External loans of BIS reporting banks vis-à-vis individual countries, exchange rate adjusted changes in gross amounts outstanding in US dollars.

^c^ Net issuance of all issuers (sovereign and corporate) by nationality of issuer.

Source: BIS, banking and international financial statistics.

But during the third quarter of 2008 international banks started to reduce their loans to banks in CEE. Countries initially affected were those with more liquid banking systems (as measured, for instance, by the ratio of total loans to total deposits, see Appendix Graph A1), including Croatia, the Czech Republic and Poland (Appendix Table A1). In the fourth quarter, banks further withdrew from the Czech Republic, Poland as well as Turkey. But banks and the non-bank sector in Croatia and several other countries received additional cross-border loans (Appendix Tables A1 and A2). This was part of a trend in which smaller CEE countries with large foreign bank presence experienced certain stability in cross-border banking flows, despite the ongoing crisis.

^9^ The Bank for International Settlements (BIS) collects and disseminates data on international banking transactions since 1964. The reports on transactions are submitted quarterly by banks from 41 advanced economies; they cover over 90% of total international banking transactions (see www.bis.org/statistics).
However, that stability proved to be only temporary. In the first quarter of 2009, international banks reduced their cross-border financing of banks in almost all of the countries in the region (Appendix Table 1). The largest reductions were to banks in Slovakia ($9.2 billion) and the Czech Republic ($2.6 billion) (Appendix Table A1). As noted above, these countries have fairly liquid banking systems (Slovakia is also in the euro area), which suggests that parent banks have used these markets to raise liquidity. Banks in Croatia and Hungary received some additional loans in Q1:2009, but the amounts in question were less than 25% of those received in Q4:2008.

Cross-border loans to the non-bank sector in CEE decreased much less than those to banks in the first quarter of 2009 (Table 3). However, the non-bank sector in Croatia (along with Bulgaria, Romania, Slovakia, Slovenia and Turkey) experienced a sharp decrease in direct financing from banks abroad (Appendix Table A2).

The withdrawal of foreign banks from the region is also evident from the reduction in their local currency loans to CEE residents. These loans are important for financial stability because they are based on the deposits of local residents in local currencies (eg, kuna deposits of Croatian households), rather than local deposits in foreign currencies, or cross-border loans (which are by definition in foreign currencies). The funding base of such “local-in-local” loans is therefore expected to be more stable than the funding base of foreign currency or cross-border loans. In addition, in countries with large foreign bank presence, such loans account for the largest part of domestic credit.

Graph 7  Change of foreign bank affiliates’ local currency claims on CEE residents (in billions of US dollars)

![Graph 7](image)

Note: BG = Bulgaria; HR = Croatia; HU = Hungary; RO = Romania; SK = Slovakia
Source: BIS international banking statistics.

After growing strongly for several years, local currency loans of international banks started to decline in the third quarter of 2008 (Graph 7). Much of this decline probably reflected weaker credit demand, as households and enterprises borrowed less anticipating
the spread of the crisis to the real sector. In the case of Croatia, such rational behaviour of
the private sector contrasted sharply with the budget financing plans of the government:
while the private sector reduced borrowing when it saw the crisis coming, the government
planned to increase borrowing from foreign banks, which is probably the most expensive
source of external financing.

But some of the decline in “local-in-local” loans probably indicated that foreign bank
affiliates were exchanging their assets in CEE currencies for more liquid or higher-rated
assets in major international currencies. The BIS data provide some support for this ex-
planation: the biggest declines in local currency claims of BIS reporting banks took place
in countries such as the Czech Republic, Poland and Slovakia, whose banking systems
are highly liquid (Graph 8). In some other countries (eg, Serbia, Romania), the size of the
decline seems to reflect very fast credit growth in the period before the crisis. This was,
however, not the case in Croatia, where credit growth was low compared to other CEE
countries. Croatia might therefore belong to the group of countries where foreign banks
extended fewer loans in local currency and invested more in euro-denominated assets.
One should note that in many smaller SEE countries and the Baltic states the decline in
local currency loans to the residents was relatively small, ie less than 5% of domestic pri-
ivate sector credit. This indicates that Western European parent banks have probably dif-
ferrntiatiated across CEE countries in Q1:2009, maintaining their commitments to the most
profitable subsidiaries and reducing them to the others.10

Graph 8 Local currency loans of foreign banks in CEE

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*a Change in local currency claims of foreign bank affiliates on CEE residents, in Q4:2008 and
Q1:2009, as a percentage of domestic private sector credit.

Note: BH = Bosnia and Herzegovina; BG = Bulgaria; CZ = Czech Republic; EE = Estonia;
HR = Croatia; HU = Hungary; LT = Lithuania; LV = Latvia; ME = Montenegro; MK = Macedonia;
PL = Poland; RO = Romania; RS = Serbia; SK = Slovakia; SI = Slovenia; TR = Turkey
Sources: IMF, BIS, author’s calculations.

10 One should also note that the results in Graph 8 are affected to some extent by fluctuations of CEE exchange
rates vis-à-vis the US dollar. At constant exchange rates, local-in-local loans seem to have been more stable.

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Regarding other types of capital flows, data on international bond issuance depict a similar picture to those on cross-border flows. After record-high issuance of international debt securities in 2007 and the first three quarters of 2008 net bond issuance in CEE fell in the fourth quarter by $3 billion. In the first quarter of 2009 net international bond issuance increased slightly due to successful placements of sovereign bonds by Poland and Turkey, albeit at much higher spreads than before the crisis. Croatia made net repayments of maturing debt in both 2008 and Q1 2009 (by $1 billion and $0.7 billion, respectively). The international bond issuance resumed in the second quarter of 2009, with net placements by Croatia, the Czech Republic, Lithuania, Poland and Turkey totalling $10 billion (Table 3).

Compared with cross-border loans and debt flows, foreign direct investment flows held up relatively well last year. For instance, net FDI inflows to Croatia in 2008 amounted to $4.6 billion, almost the same as in 2007. However, in the first quarter of 2009 there was a sharp deceleration in net FDI inflows, to $0.5 billion.

Meanwhile, despite indications of severe retrenchment of capital inflows, the balance of payments data suggest that external current account deficit of Croatia increased, from $4.4 billion (7.6% of GDP) in 2007 to $6.3 billion (9.4% of GDP) in 2008. Projections of the deficit – and, hence, of external borrowing requirements – for 2009 are highly uncertain at present because it is extremely difficult to estimate how deep and prolonged the downturn in external demand will be. In any event, one can be fairly certain that the current account deficit will decline in 2009 because more restricted and costlier external finance will lead to a decline in imports of goods and services. The deficit in Q1:2009 was estimated at $2.4 billion, almost 40% less than in the same quarter of previous year (HNB, 2009). In July, the Economics Institute Zagreb (EIZ, 2009a) projected a decrease in the external current account deficit to 3½% of GDP.

This deficit could still be difficult to finance in the current environment. For instance, the external funding constraint forced Estonia to cut its current account deficit from close to 17% of GDP in the last quarter of 2007 to 6% in the last quarter of 2008. One should note in this context that Estonia has a much sounder government balance sheet than Croatia: during 2001-2008 the government accumulated about 10% of GDP in reserves by consistently running budget surpluses. In Croatia, by contrast, gross external financing in the third budget revision is projected at 3½% of GDP and net external financing at 0.8% of GDP or one-fifth of the overall external deficit.

### 3.3 Impact on the budget financing in Croatia

The spread of the global financial crisis to CEE has manifested itself in a significant tightening of the external financing constraint for the Croatia government. The cost of external borrowing, measured by the yield on sovereign bonds (ie, the rate of return that investors require to hold Croatian government debt) increased from 3% in September 2005 to 6½% in July 2009 (Graph 9). The risk premium on government’s external borrowing, measured by the spread on the index of widely traded emerging market bonds Euro EMBI Global, increased roughly three times since the middle of 2008, and 17 times since the middle of 2007 (Graph 10). Events such as resignation of the prime minister in late June 2009 had a significant, albeit temporary, impact on bond yields and spreads.
Despite this extreme tightening of external financing conditions, the original budget for 2009, prepared in the last quarter of 2008, envisaged international bond issuance of 5.5 billion kuna (€750 million). It is puzzling why such an issuance was planned in the midst of the worst global financial crisis in more than 70 years. Moreover, it is difficult to comprehend plans to issue debt in such a precarious environment after a five-year absence from international bond markets. More specifically, the Croatian government had issued only four Eurobonds this decade: in March 2001, February 2003, April 2004, and the latest one in May 2009. Croatian Eurobonds were thus issued either before or after the period when bond market conditions were the most favourable.

Graph 9 Yield of Croatian Government Eurobonds (Euro EMBI Global HR)  
(in percentage points)

Source: JP Morgan.

For emerging market countries such as Croatia, regular presence in international bond markets is essential for establishing a sound creditor record and thus improving sovereign credit ratings. Over time it may help countries overcome the so-called “original sin”, ie, the inability to issue international bonds in domestic currency.\(^{11}\) And once a country is able to issue debt in its own currency internationally, it has more or less solved its budget financing problem and can engage in expansionary fiscal policy, as the current example of advanced economies and some well-standing emerging markets (eg China) shows. Regular issuance of international debt also helps the private sector to gain access to global capital markets and gain its own credit ratings, because risk premia for lending to the private sector are typically priced off the sovereign bond spreads.

\(^{11}\) A decade ago the “original sin” was considered to be an insurmountable obstacle for the development of emerging market economies into mature market economies (see Eichengreen and Hausmann, 1999). However, since then many emerging market countries – including Brazil, Chile, China, the Czech Republic, Korea and Singapore – have issued international bonds denominated in domestic currency.
One of the consequences of Croatia’s rare presence in international bond markets has been the inability to improve its sovereign credit ratings for foreign debt since 1997, when these ratings were first introduced. By contrast, credit ratings of all other CEE countries have improved over this period, in many cases significantly.

Another consequence has been the high cost of the latest Eurobond issued in May 2009, both compared to previous Croatian Eurobonds and debt issued by other CEE countries in the first half of 2009. For instance, the yield to maturity on the new Eurobond was 6.6% at issuance, only marginally lower than the 6.8% yield on the first Croatian Eurobond issued in this decade, in March 2001 (Graph 11). One should note that in March 2001 financial markets were also in a turmoil following the bursting of the hi-tech bubble, and Croatia was still emerging from international isolation of the 1990s. In addition, the spread on the latest Croatian Eurobond at the time of its issuance in late May 2009 (350 basis points) was significantly higher than CDS spreads on previously issued Croatian Eurobonds (from 85 to 110 basis points). This indicates greater doubts among investors whether the current Croatian government will be able to pay back its debt on this Eurobond compared to the previous ones. It is therefore hard to support the authorities’ claims that the placement of this Eurobond was a success.

The cost of the latest Croatian Eurobond was also high compared to debt issued by other CEE countries in the first half of 2009 (Graph 12). Given many similarities in the fiscal area, a comparison with Hungary, the central European country hardest hit by the crisis, is particularly revealing. Except for one week, the yield to maturity on Hungary’s

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For illustration, paying just 50 basis points less on the €750 million Eurobond issued in May 2009 would have saved about 140 million kuna over five years. This is equivalent to almost 50% of the annual expenditure on graduate education of young scholars at all universities and scientific institutes in Croatia in 2008.
Eurobond has been consistently lower than the yield on the Croatian Eurobond, despite higher coupon interest (6.75% vs 6.5%), and despite the fact that Hungary’s financial system was on the brink of collapse in October 2008. The key difference is that the Hungarian government – unlike the Croatian one – implemented a whole series of deep expenditure cuts, thus convincing investors that it was taking the task of fiscal consolidation seriously.

Graph 11 Croatian Eurobond issues, 2001-2009 (yield to maturity, in percent)

Graph 12 CEE Eurobond issues in 2009 (yield to maturity, in percent)
It is worth noting in this context that despite rising bond yields and interest rates, planned payments of interest on market instruments and bank loans were kept unchanged from the original budget through the third revision (Graph 13). This inconsistency was left unnoticed even in the latest IMF Staff Report (IMF, 2009).

**Graph 13 Interest payments and cost of financing**

- **Note:** Disbursements include bonds and T-bills issued, and total loans received by the government; in billions of kuna, left-hand scale. Interest payments on bonds and T-bills issued, and on loans received by the government; in billions of kuna, left-hand scale. Interest rates shown are averages on short-term kuna loans not indexed to foreign exchange. Bond yields on Croatian Government Eurobond with a 6¾% coupon, maturing in 2011. Interest rates and bond yields are averages over Q1:2008 (for the 2008 budget); Q4:2008 (for the original 2009 budget); Q1:2009 (for the first revision of the 2009 budget); and Q2:2009 (for the second and third revisions).

**Sources:** Ministry of Finance; HNB; author’s calculations.

In summary, the external finance has become not only more expensive but also scarcer as a result of the crisis. These tight conditions are not likely to improve significantly over the next couple of years – the extremely favourable conditions that prevailed in global financial markets through 2007 may not be seen again for quite a while. In addition to immediate problems with rollover of maturing foreign debt in 2009, this means that the entire Croatian economy – the corporate sector, banks, households as well as the public sector – faces the challenge of adjusting to a new pattern of growth that will have to be based primarily on domestic rather than foreign sources of saving (see Čičin-Šain, 2008). One should also note that the crisis is not over yet. Despite the severe downturn in the first half of 2009, the Croatian economy and the financial sector in particular could be hit by further shocks in the period ahead. This calls for fiscal policy to create additional room to support the economy.
4 Why Croatia cannot pursue expansionary fiscal policy?

The main macroeconomic policy tools – monetary, fiscal and regulatory policies for labour and financial markets and market competition – have to be co-ordinated in order to achieve the main macroeconomic objectives: stable growth, low inflation, full employment, financial stability and sustainable internal (ie fiscal) and external (ie current account) balances. How that co-ordination takes place depends to a considerable extent on the monetary and exchange rate framework adopted by a country. In the case of Croatia, that framework is a managed floating exchange rate regime, in which the central bank’s primary objective is to maintain price stability and its main operational target is to maintain stability of the national currency, the kuna. Within this framework – but also more generally within other policy frameworks – there is only limited room for fiscal expansion.

In addition, as a small open economy closely integrated with the real sector and financial markets in the euro area Croatia has almost completely liberalised its trade and capital transactions. This means that the room for independent monetary policy is very limited, so adjustment to shocks such as the global financial crisis has to take place through fiscal tightening and cuts in real wages and real asset prices, rather than exchange rate depreciation and interest rate cuts. But the room for independent monetary policy would have been limited even if Croatia had adopted an inflation targeting regime with floating exchange rates, as demonstrated by the experience of Poland, Romania and Serbia discussed above.

In order to show why Croatia cannot pursue expansionary fiscal policy, this section first analyses how macroeconomic policy coordination was conducted during the latest crisis in CEE countries with different monetary policy frameworks. In the second part, it develops theoretical and empirical arguments against fiscal expansion in the current circumstances. Two main conclusions emerge. First, monetary policy was adapting quickly to changing circumstances during the crisis but fiscal policy provided insufficient support to macroeconomic stabilisation. Second, fiscal expansion in the current environment would seriously undermine macroeconomic and financial stability, and push the economy deeper into crisis instead of helping it overcome the downturn.

4.1 Monetary and fiscal policy mix

The past few months have been one of the most challenging periods for macroeconomic policies in Croatia and other CEE countries since the start of the transition in 1989. Despite the rapid rise in inflationary pressures through much of 2008, fiscal policy in Croatia and other CEE countries generally continued to stimulate aggregate demand leaving the main responsibility for combating inflation to central banks. At the same time, the disruptions in international credit markets, which mutated into a full-scale global financial crisis in September 2008, have initially forced central banks in the region to pursue two different objectives – ensuring banking system liquidity and addressing still strong inflationary pressures – which have opposing implications for interest rate policy (ie, lower rates in the former, higher in the latter case). In February 2009, when CEE plunged into financial turmoil, the policy focus shifted again – this time in a matter of weeks – from
softening the sharp fall in output toward preventing a financial meltdown. And since March 2009, the main policy challenge for many countries in the region – Croatia in particular – has become how to secure financing of the state budget while maintaining financial stability and providing a measure of support to the economy.

Monetary policy. Countries with inflation targeting strategies of monetary policy – the Czech Republic, Hungary, Poland, Romania, Serbia and Turkey – have generally been able to adapt more easily to changing macroeconomic circumstances than those with fixed exchange rates (Bosnia and Herzegovina, Bulgaria, Estonia, Latvia and Lithuania) or managed exchange rate regimes (Croatia and Macedonia). This is partly because inflation targeting central banks, supported by well-defined institutional frameworks, have been able to react to rising inflationary pressures by increasing short-term nominal interest rates. Many of these countries consequently experienced substantial appreciation of their exchange rates through mid-2008, which in turn helped contain imported inflation.

In countries with fixed exchange rates, the opportunities for raising interest rates – and the effects that such a move would have – were limited not only by exchange rate regimes but also by the high degree of currency substitution. As a result, the authorities had to deal with inflationary pressures indirectly, for instance, by trying to tackle the sources of inflation such as the rapid credit growth via prudential regulations. In Bulgaria and Croatia, central banks thus progressively tightened reserve requirements and other prudential regulations through the first half of 2008 in order to limit credit growth. More administrative measures, such as bank-by-bank credit limits, were also used (eg in Croatia and Montenegro).

Starting in October 2008, the policy focus shifted from fighting inflation to providing liquidity to domestic banking systems. The collapse of Lehman Brothers affected many parent banks with operations in CEE forcing them to reduce their debt ratios and increase the share of liquid assets on their balance sheets. As discussed in Section 2, this had major repercussions for market liquidity in CEE, especially in those countries that are financially closely integrated with Western Europe. As oil prices dropped sharply at the same time, removing one of the main threats to inflation, the inflation targeting central banks responded by aggressively cutting interest rates.

In countries with fixed or tightly managed exchange rates, the policy response to the external shock in October depended on the spillovers from the global markets on the domestic banking systems. Where banking sector stability was at risk, this became a priority for monetary policy. For instance, banks in Bosnia and Herzegovina, Montenegro and Serbia (and to a lesser extent Croatia) were adversely affected by a substantial withdrawal of foreign currency deposits during the autumn of 2008. Central banks in these countries responded by lowering reserve requirements (in particular on foreign borrowing) to provide liquidity to the banks, and, together with the fiscal authorities, by increasing deposit insurance limits.

Where stability of the banking system was not an immediate concern (eg, in Bulgaria, Croatia and Lithuania), central banks expanded repo operations, lowered the reserve requirements or loosened various prudential regulations on bank lending. The Croatian National Bank, for instance, abolished the marginal reserve requirement on banks’ for-
eign borrowing in October 2008 in order to boost commercial banks’ liquidity; in November, it also reduced the reserve requirement rate by 3 percentage points in order to provide additional liquidity. As noted above, although these measures were in principle expansionary, in practice they failed to stimulate the economic activity during the first half of 2009. The reason was that most of the banking system liquidity, including additional liquidity released by central bank measures, was absorbed by the government, forcing the private sector to withdraw its deposits to finance its operations.

In view of the sharp deterioration of the real sector outlook, as late as mid-February most market analysts expected central banks in CEE to continue with interest rate cuts and other measures aimed at improving liquidity. However, the market turmoil unleashed in February 2009 by the Moody’s downgrade warning to parent banks with operations in CEE once again shifted the policy focus in several countries, this time to stabilising the exchange rates and preventing the onset of a full-blown financial crisis. The Czech National Bank, for instance, announced a likely interest rate hike to prevent a further slide of the koruna. The Polish authorities, which have not intervened in foreign exchange markets for over a decade, sold some of the funds that Poland receives from the EU in order to boost the falling zloty. More governments announced the start or intensification of talks with the IMF on emergency loans, and central banks and governments in several other countries called for co-ordinated EU approach to help stabilise CEE markets.

**Fiscal policy.** Like monetary policy, fiscal policy had to deal with several rapidly moving targets over the past year. During the first half of 2008, when inflation was the main concern, fiscal policy in most CEE countries, including Croatia, responded with greater spending instead of more restrictive measures (see Section 2). Ex post, such stance of fiscal policy was rationalised by the belief that the rise in inflation would be temporary and would not affect wage expectations. Inflation expectations, however, continued to rise. In the case of Croatia, this ex post rationalisation was not even invoked by the government – it seemed natural to the policymakers that that spending should increase in line with the rising revenue.

In the autumn of 2008, the focus of fiscal measures shifted toward ensuring banking stability through an increase in guarantees on bank deposits. This was arguably the most successful crisis related fiscal measure taken so far. And in the first half of 2009, when growth and tax revenues collapsed, the policy focus shifted again toward securing the necessary financing of the budget deficit.

The end result was that fiscal performance deteriorated in almost all CEE countries in 2008 and 2009 (Table 4). Only Hungary and Bulgaria improved their fiscal positions substantially last year. Croatia, as discussed above, reduced its fiscal deficit marginally. However, by keeping one of the highest revenue and expenditure shares in the region, the structure of the Croatian budget remained fundamentally unhealthy.

Further challenges arose in late 2008 and early 2009 amid growing demands for fiscal stimulus packages. Partly in response to the packages announced by many Western European governments, some opposition politicians and special interest groups have argued that the Croatian authorities should put in place their own programmes of assistance for selected sectors of the economy or for public infrastructure development. Other CEE countries have not been immune to such demands, either. According to the latest Europe-
an Commission (2009) forecast, budget deficits are projected to increase in 2009 by 2% of GDP on average, and by up to 7-8% in Latvia and Montenegro (Table 4). In the Czech Republic, Poland, Slovakia and Slovenia budget deficits will increase by 2½-4½% GDP, partly as a result of the planned expansion in public spending (see below).

### Table 4 Selected fiscal indicators, 2007-09 (as a percentage of GDP)\(a\)

<table>
<thead>
<tr>
<th>General government balance</th>
<th>Budget structure 2008</th>
<th>Public debt 2008(b)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2007</td>
<td>2008</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>-0.6</td>
<td>-1.5</td>
</tr>
<tr>
<td>Hungary</td>
<td>-4.9</td>
<td>-3.4</td>
</tr>
<tr>
<td>Poland</td>
<td>-1.9</td>
<td>-3.9</td>
</tr>
<tr>
<td>Slovakia</td>
<td>-1.9</td>
<td>-2.2</td>
</tr>
<tr>
<td>Slovenia</td>
<td>0.5</td>
<td>-0.9</td>
</tr>
<tr>
<td>Estonia</td>
<td>2.7</td>
<td>-3.0</td>
</tr>
<tr>
<td>Latvia</td>
<td>-0.4</td>
<td>-4.0</td>
</tr>
<tr>
<td>Lithuania</td>
<td>-1.0</td>
<td>-3.2</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>0.1</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Croatia</strong></td>
<td><strong>-1.2</strong></td>
<td><strong>-0.7</strong></td>
</tr>
<tr>
<td>Romania</td>
<td>-2.5</td>
<td>-5.4</td>
</tr>
<tr>
<td>Turkey</td>
<td>-1.0</td>
<td>-2.1</td>
</tr>
<tr>
<td>Albania</td>
<td>-3.8</td>
<td>-5.2</td>
</tr>
<tr>
<td>Bosnia-Herzegovina</td>
<td>-0.1</td>
<td>-1.9</td>
</tr>
<tr>
<td>Macedonia</td>
<td>0.6</td>
<td>-1.0</td>
</tr>
<tr>
<td>Montenegro</td>
<td>6.4</td>
<td>1.5</td>
</tr>
<tr>
<td>Serbia</td>
<td>-1.9</td>
<td>-2.3</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>-0.7</strong></td>
<td><strong>-2.2</strong></td>
</tr>
<tr>
<td><strong>Euro area</strong></td>
<td><strong>-0.6</strong></td>
<td><strong>-1.9</strong></td>
</tr>
</tbody>
</table>

\(a\) Official estimates and projections. For Croatia, EIZ (2009a).

\(b\) Gross debt on a general government basis.

Sources: European Commission, Spring 2009 Forecast, May 2009; IMF country reports; national data.

In summary, fiscal policy in Croatia and elsewhere in the region provided only limited support to monetary policy in the crisis environment of 2008-09. In view of the severely deteriorating external and domestic financing conditions, fiscal policy in 2009 should have been significantly tightened, not loosened.

### 4.2 What are the risks from fiscal expansion?

Over the past three decades a broad consensus against discretionary fiscal policy has emerged in economics profession and policymaking practice. Four main sets of arguments have been advanced to justify this consensus (see Creel and Sawyer, 2009, pp. 134–135).
The first is that discretionary fiscal policy is subject to a number of delays (from decision to implementation) that make it impossible to use it quickly and flexibly in response to shocks. By the time the effects of policy are felt the shock it was supposed to address may have vanished. These arguments were, among others, at the roots of the shift of attention from fiscal to monetary policy as the main stabilisation tool. Monetary policy can be decided and implemented quickly, whereas expenditure and tax changes require parliamentary approval and generally take much longer to implement.

The second set of arguments against discretionary fiscal policy originates from the rational expectations revolution and the Lucas’ Critique (Lucas, 1976; Mihaljek, 1985). First, a fiscal expansion may crowd out private expenditure, in particular investment, to such an extent that the overall increase in GDP becomes negligible. This may happen because the deficit is financed through borrowing, thus increasing interest rates and the cost of investment – as was the case in Croatia in the first half of 2009. A weaker version of this argument focuses on the intertemporal budget constraint of rational consumers, who anticipate future tax increases to repay current deficits and hence react by increasing their current savings and reducing their expenditure (the so-called Ricardian equivalence, see Barro, 1974).

A third argument against fiscal policy discretion, which is particularly relevant for externally vulnerable economies such as Croatia, is the twin deficits hypothesis: based on the national accounting identity it can be shown that an increase in budget deficit may create an equivalent deficit of the current account, so that total domestic income may not increase, and the expansionary effect may benefit other countries through increased imports.

Finally, even if discretionary fiscal policy succeeds in improving economic activity and reducing unemployment, it may be destabilising by raising inflation and creating problems for financial stability. In such circumstances, domestic and foreign investors may react by withholding funds from the economy, thus causing financing problems for the private sector and the state budget.

The main policy implication of these theoretical arguments is that fiscal policy should support the economy during a slowdown primarily through the operation of automatic stabilisers. Provided that the underlying fiscal position was sound, the fiscal deficit would automatically rise during a slowdown due to decreasing tax revenues and rising social security transfers. The scale and strength of automatic stabilisers varies between countries and depends primarily on the responsiveness of the tax system and unemployment and social security benefits to GDP growth. For instance, for euro area countries the cyclical component of the budget deficit – ie, non-discretionary fluctuations of revenue and expenditure over the business cycle – is expected to increase by about 1% of GDP in 2009 (OECD, 2008). Automatic stabilisers thus provide an important contribution to sustaining aggregate demand in the economy. But at the same time they do result in a deterioration of the fiscal position.

The consensus view also held that the use of large-scale discretionary fiscal stimuli should be confined only to exceptionally severe recessions. The current crisis no doubt meets this definition: with interest rates at historical lows and nearly universal crisis of confidence in the real and financial sectors, the channels of monetary policy transmission
have become ineffective in many countries, so there seems to be a need for another tool to boost output and protect against even deeper and longer recession. Governments of many large countries have therefore launched fiscal stimulus packages over the past year to boost output and fight rising unemployment. The fiscal stimulus in Europe is estimated at almost 3% of GDP (Saha and von Weizsäcker, 2009). IMF (2008) expects that the tax cuts and increased spending in 2009 will cost around 1.5% GDP globally. The ongoing fiscal expansion thus represents a significant departure from the broad consensus against discretionary fiscal policies. However, governments considering fiscal expansion should bear in mind the possible short-term and long-term risks of such measures.

**Sustainability risks.** The scope to stimulate the economy through fiscal expansion in countries such as Croatia is limited first and foremost by foreign and domestic investors’ perception about the country’s fiscal solvency. This perception has taken a severe hit in the latest round of crisis and is not likely to recover soon.

Second, with any fiscal expansion there is a potential threat to long-term sustainability of public finances. A lot depends on the initial state of public finances and sustainability concerns present before the onset of the crisis. In many European countries, including Croatia, such concerns are clearly relevant, given the history of high budget deficits and high public debt. Operations conducted by many governments to rescue troubled financial institutions may also increase the stock of public debt. Finally, a major fiscal sustainability constraint is the impact of the ageing of the population on pensions and healthcare spending.

The current crisis has revealed that the fiscal sustainability outlook of many countries is much worse than previously thought. Countries that have enjoyed very strong growth and fiscal surpluses in recent years, such as Ireland, Spain and Latvia, are now experiencing very severe recessions, leading to a dramatic reassessment of their growth prospects and, as a result, their fiscal sustainability. For instance, Spain’s AAA long-term sovereign debt rating was lowered by S&P to AA+ in January 2009. For Latvia, the sovereign credit rating was downgraded four times between October 2008 and August 2009. One common feature of these countries and Croatia is that their economic expansion and growth of budget revenues have relied to a great extent on construction and real estate sectors, which are currently experiencing a severe downturn. Past experience suggests that downturns in the construction sector tend to be protracted and severe: in Germany, for instance, following the building boom spurred by reunification in the early 1990s output and employment in the construction sector were declining for ten years (ie, between 1994 and 2004), with both contracting by a cumulative of 30% over the period (BIS, 2006).

The reassessment of countries’ solvency by financial markets is an inevitable by-product of the current increase in risk aversion and the “flight to safety” by global investors. In the current uncertain environment, investors are shifting to bonds issued by the most credible issuers. This move is being facilitated by the significant increase in bond issuance by AAA rated governments, such as the United States, the United Kingdom, France and Germany. As a result, spreads on government bonds and credit default swaps of euro area countries such as Greece and Ireland (whose fiscal positions are considered particularly fragile) as well as bond and CDS spreads of all CEE countries have risen sharply.
Concerns expressed by the markets in the latter case also include large external imbalances, large-scale foreign borrowing by the private sector and the widespread use of foreign-currency housing loans. In these circumstances, an additional fiscal stimulus could be perceived by the markets as an irresponsible policy, and lead to a vicious circle of further currency depreciation leading to defaults on foreign currency borrowing and possibly resulting in a banking crisis.

**Effectiveness of fiscal stimulus plans.** The effectiveness of discretionary fiscal policy actions depends on the way the stimulus package is designed and announced to the public. Incoherent and unclear plans may lead to uncertainty among private agents, so the end effect may be detrimental rather than supportive to economic activity. In addition, discretionary fiscal actions usually take considerable time to get implemented, especially in the case of infrastructure projects. The stimulus might thus start at a time when the economy has already recovered, adding to the boom and risks of overheating.

The initial condition of public finances and the way the future costs of the stimulus are perceived by consumers and investors have a strong influence on the effectiveness of the fiscal package. Private agents often rationally expect a tightening of fiscal policy after the recession knowing that the government will have to repay the accumulated debt and will either have to increase taxes or reduce public spending. Germany again provides a good example: after the fiscal expansion of the 1990s, which financed reunification, German households reduced their consumption sharply in the early 2000s, expecting a decline in future pension and health care benefits. In other words, households may decide to save rather than spend the additional money received from a temporary boost to government spending. Empirical research shows that such behaviour, consistent with Ricardian equivalence, is more likely to occur when the degree of “fiscal stress” represented by the level of government debt is relatively high (see Gale and Orszag, 2004).

A discretionary fiscal stimulus is also associated with a number of political risks. As a result of political pressures, stimulus funds are often channelled not to those sectors of the economy where they would provide the greatest benefit in terms of output and employment, but to the sectors such as infrastructure construction where the use of stimulus funds is highly visible by the media and hence of greatest value to the politicians, not to mention special interest groups such as the construction lobby.

To the extent that a country can finance fiscal expansion without a major increase in sustainability risk, the emerging consensus is to focus the incentives towards cushioning the impact on the poor and vulnerable segments of the population (see World Bank, 2009). This policy could be implemented through a temporary increase (e.g. over a 12-month period) in social assistance spending on child allowances, unemployment benefits and the lowest pensions. These target groups have a high propensity to consume domestic goods and would thus help support domestic production during the downturn.

The effectiveness of budgetary expansion in easing the recession also depends on the openness of the economy. Fiscal multipliers are usually lower in small and more open economies, where a relatively big part of the funds directed to the private agents are spent on imports rather than locally produced goods and services (IMF, 2008). Croatia seems to fit this description fairly well.
Increased government borrowing in addition implies a crowding-out of the private sector from the domestic credit supply. As discussed in Section 2, banks and other domestic investors often prefer to lend to the government rather than the private sector during recessions, as government bonds and loans represent a relatively safe and high-yielding asset.

In summary, there are several important risks that should be taken into account when considering a fiscal stimulus. The design, timing and the way the stimulus package is communicated to the markets have a crucial impact on its effectiveness. The need for discretionary fiscal action should also be assessed against the initial condition of public finances, the degree of openness of the economy, and the likely extent of crowding-out of the private sector. The risks of sustainability and effectiveness are highly relevant for Croatia at present. Giving in to populist pressures and embarking on fiscal expansion in the current near-crisis environment would seriously undermine macroeconomic and financial stability and could push the economy deeper into crisis instead of helping it overcome the downturn.

5 Concluding remarks

The 2009 Croatian budget odyssey was still far from over at the time of this writing (summer 2009). One side benefit of these apparently aimless wanderings has been the unearthing of a huge pile of wasteful expenditure financed by the budget and public enterprises. The increased scrutiny of government spending by the media and the public is a most welcome development. Public finance analysts in Croatia have since long identified key areas where deep reforms were overdue including public administration (Bajo, 2009), fiscal decentralisation (Alibegović-Jurlina, 2006; Ott and Bajo, 2002), the pension system (Nestić, 2006), health care (Mihaljek, 2007) and state aids (Kesner-Škreb and Jović, 2007), among others. It remains to be seen if this research will eventually be vindicated and if the future budgets will become slimmer and more efficient as a result of the current crisis.

Over a longer term, fiscal policymakers would also need to put the entire government budget on a sounder countercyclical footing. For instance, there has been virtually no research in Croatia on the automatic stabiliser properties of the tax and expenditure systems or the optimal structure of deficit financing (domestic vs. external; bonds vs. loans). Nor has any thought been given to the build-up of fiscal reserves in good times (eg, setting aside a portion of the VAT revenue from tourism) in order to create a fiscal “rainy day” fund; or to the introduction of fiscal rules.

A credible fiscal position for Croatia is also needed more urgently in order to ensure short- and medium-term fiscal sustainability and maintain market confidence. Disregarding market developments in budget planning – as was clearly the case over the past year – can be very costly. A further widening of the budget deficit in the current circumstances could be perceived by the markets as an irresponsible policy, and could lead to a vicious circle of further tightening of financing conditions, pressures on the kuna, crowding-out of the private sector, plummeting growth and tax revenue, and rising non-performing loans.

The list of reforms that can be launched quickly and that would support credible medium-term consolidation of public finances is long and well known. It includes, among others, civil service reform, rationalization of the structure of government operations, im-
proving cost recovery for social services, advancing the restructuring of loss making state-owned enterprises to reduce subsidies, streamlining social spending, reforming the first pillar of the pension system to help ensure its sustainability, and, as shown in this paper, significantly improving deficit financing and debt management functions in the process of budget planning.

The current budget odyssey in Croatia is a direct consequence of the failure to implement these reforms after having them on the policy agenda for so many years. Initiating these reforms today will go a long way toward establishing fiscal policy credibility and anchoring market expectations. For instance, measures to address age-related spending increases in social security and health are a good way for quality fiscal adjustment with a relatively limited negative impact on domestic demand, if any, in the short term. Similarly, progress in privatisation will both increase private sector growth and relieve the state budget from substantial spending on subsidies.

Appendix

Table A1  Growth of external loans vis-à-vis banks in CEE (Estimated exchange rate adjusted changes in gross amounts outstanding at end-period)\(^a\)

<table>
<thead>
<tr>
<th>Country</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>H1 08</th>
<th>Q3 08</th>
<th>Q4 08</th>
<th>Q1 09</th>
<th>2007 GDP</th>
<th>2008 GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic</td>
<td>1,287</td>
<td>5,255</td>
<td>-436</td>
<td>3,491</td>
<td>-1,674</td>
<td>-2,253</td>
<td>-2,595</td>
<td>3.0</td>
<td>-0.2</td>
</tr>
<tr>
<td>Hungary</td>
<td>3,728</td>
<td>5,328</td>
<td>10,643</td>
<td>5,958</td>
<td>-26</td>
<td>4,711</td>
<td>1,096</td>
<td>3.8</td>
<td>6.8</td>
</tr>
<tr>
<td>Poland</td>
<td>4,055</td>
<td>19,253</td>
<td>11,481</td>
<td>18,570</td>
<td>-2,443</td>
<td>-4,646</td>
<td>-650</td>
<td>4.5</td>
<td>2.2</td>
</tr>
<tr>
<td>Slovakia</td>
<td>-3,229</td>
<td>4,937</td>
<td>3,000</td>
<td>2,620</td>
<td>-443</td>
<td>823</td>
<td>-9,169</td>
<td>6.6</td>
<td>3.1</td>
</tr>
<tr>
<td>Slovenia</td>
<td>2,905</td>
<td>4,718</td>
<td>1,517</td>
<td>2,657</td>
<td>-932</td>
<td>-208</td>
<td>-1,143</td>
<td>10.0</td>
<td>2.8</td>
</tr>
<tr>
<td>Estonia</td>
<td>1,579</td>
<td>3,985</td>
<td>1,699</td>
<td>1,289</td>
<td>11</td>
<td>399</td>
<td>-760</td>
<td>19.1</td>
<td>7.3</td>
</tr>
<tr>
<td>Latvia</td>
<td>4,320</td>
<td>4,761</td>
<td>2,763</td>
<td>1,784</td>
<td>963</td>
<td>16</td>
<td>1,586</td>
<td>16.6</td>
<td>8.1</td>
</tr>
<tr>
<td>Lithuania</td>
<td>2,804</td>
<td>4,437</td>
<td>3,313</td>
<td>1,038</td>
<td>1,722</td>
<td>553</td>
<td>-213</td>
<td>11.4</td>
<td>7.0</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>274</td>
<td>2,121</td>
<td>5,198</td>
<td>3,408</td>
<td>1,894</td>
<td>-104</td>
<td>-211</td>
<td>5.4</td>
<td>10.0</td>
</tr>
<tr>
<td>Croatia</td>
<td>1,802</td>
<td>-890</td>
<td>913</td>
<td>544</td>
<td>-1,859</td>
<td>2,228</td>
<td>540</td>
<td>-1.5</td>
<td>1.3</td>
</tr>
<tr>
<td>Romania</td>
<td>4,248</td>
<td>12,674</td>
<td>9,311</td>
<td>6,030</td>
<td>1,992</td>
<td>1,289</td>
<td>-2,528</td>
<td>7.5</td>
<td>4.7</td>
</tr>
<tr>
<td>Turkey</td>
<td>3,763</td>
<td>2,945</td>
<td>4,504</td>
<td>2,830</td>
<td>8,315</td>
<td>-6,641</td>
<td>-2,821</td>
<td>0.5</td>
<td>0.6</td>
</tr>
<tr>
<td>Albania</td>
<td>-384</td>
<td>150</td>
<td>-175</td>
<td>-155</td>
<td>-20</td>
<td>0</td>
<td>-21</td>
<td>1.4</td>
<td>-1.3</td>
</tr>
<tr>
<td>Bosnia-Herzegovina</td>
<td>285</td>
<td>612</td>
<td>421</td>
<td>387</td>
<td>-183</td>
<td>217</td>
<td>41</td>
<td>4.0</td>
<td>2.3</td>
</tr>
<tr>
<td>Macedonia</td>
<td>-3</td>
<td>31</td>
<td>-53</td>
<td>-10</td>
<td>-7</td>
<td>-36</td>
<td>3</td>
<td>0.4</td>
<td>-0.6</td>
</tr>
<tr>
<td>Serbia</td>
<td>1</td>
<td>-1,163</td>
<td>736</td>
<td>-55</td>
<td>109</td>
<td>682</td>
<td>-295</td>
<td>-2.9</td>
<td>1.5</td>
</tr>
<tr>
<td>Montenegro</td>
<td>0</td>
<td>474</td>
<td>298</td>
<td>174</td>
<td>95</td>
<td>29</td>
<td>-5</td>
<td>12.3</td>
<td>6.2</td>
</tr>
<tr>
<td>Total CEE-17</td>
<td>27,435</td>
<td>69,628</td>
<td>55,133</td>
<td>50,560</td>
<td>7,514</td>
<td>-2,941</td>
<td>-20,317</td>
<td>3.6</td>
<td>2.4</td>
</tr>
</tbody>
</table>

\(^a\) External loans of BIS reporting banks.

Sources: BIS; IMF.
### Table A2 Growth of external loans vis-à-vis non-banks in CEE (Estimated exchange rate adjusted changes in gross amounts outstanding at end-period)*

<table>
<thead>
<tr>
<th></th>
<th>In millions of USD</th>
<th>As a percentage of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2006</td>
<td>2007</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>2,375</td>
<td>2,242</td>
</tr>
<tr>
<td>Hungary</td>
<td>445</td>
<td>5,669</td>
</tr>
<tr>
<td>Poland</td>
<td>4,314</td>
<td>4,320</td>
</tr>
<tr>
<td>Slovakia</td>
<td>660</td>
<td>1,959</td>
</tr>
<tr>
<td>Slovenia</td>
<td>543</td>
<td>2,191</td>
</tr>
<tr>
<td>Estonia</td>
<td>1,099</td>
<td>310</td>
</tr>
<tr>
<td>Latvia</td>
<td>591</td>
<td>2,258</td>
</tr>
<tr>
<td>Lithuania</td>
<td>1,323</td>
<td>1,215</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>2,490</td>
<td>1,550</td>
</tr>
<tr>
<td>Croatia</td>
<td>1,914</td>
<td>5,170</td>
</tr>
<tr>
<td>Romania</td>
<td>3,809</td>
<td>5,697</td>
</tr>
<tr>
<td>Turkey</td>
<td>14,328</td>
<td>19,446</td>
</tr>
<tr>
<td>Albania</td>
<td>-471</td>
<td>-23</td>
</tr>
<tr>
<td>Bosnia-Herzegovina</td>
<td>-98</td>
<td>270</td>
</tr>
<tr>
<td>Macedonia</td>
<td>30</td>
<td>85</td>
</tr>
<tr>
<td>Serbia</td>
<td>0</td>
<td>2,433</td>
</tr>
<tr>
<td>Montenegro</td>
<td>0</td>
<td>189</td>
</tr>
<tr>
<td>Total CEE-17</td>
<td>33,352</td>
<td>54,981</td>
</tr>
</tbody>
</table>

* External loans of BIS reporting banks.

Sources: BIS; IMF.

### Graph A1 Ratio of total loans to total deposits*

* Private sector loans divided by total deposits in the domestic banking system (short- and long-term); end of period (for 2008, mostly August)

Napomena: BG = Bulgaria; CZ = Czech Republic; EE = Estonia; HR = Croatia; HU = Hungary; LT = Lithuania; LV = Latvia; PL = Poland; RO = Romania; RS = Serbia; TR = Turkey

Source: IMF, International Financial Statistic
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