# Walking the Tightrope: A First Glance on the Impact of the Recent Global Financial Market Turbulence on Central, Eastern and Southeastern Europe<sup>1, 2</sup>

The Central, Eastern and Southeastern European (CESEE) countries have, to some extent, felt the impact of the international financial market turbulence observed since July 2007. While CESEE markets tended to follow the negative global investor sentiment in general, they performed relatively well compared to other emerging markets. Overall, increases in risk premiums and asset price losses were rather contained in the region, which may reflect a positive impact on investor judgment induced by EU convergence. However, the fact that the financial turmoil had a stronger impact on countries with weaker economic fundamentals and/or insufficient policy credibility shows that correcting overly large economic imbalances remains imperative in a relatively fragile international environment.

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IEL classification: G15, O16, O52

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#### 1 Introduction

Supported by loose monetary conditions in the United States, an environment of abundant global liquidity prevailed for over half a decade between 2001 and 2007. In the absence of major inflationary pressures, historically low interest rate levels contributed to a pick-up in credit growth and asset prices (mainly in the U.S.A.), thereby underpinning consumption and investment propensity and a strong economic momentum. However, the benign economic and inflationary conditions masked increasing vulnerabilities that resulted from the mispricing of risk. On this note, the abundant availability of credit (partly driven by banks' proactive lending strategies geared toward higher profits) together with expectations of an ongoing rise in house prices induced many U.S. borrowers with low

credit standing (subprime borrowers) to take on adjustable rate mortgages (ARMs) with teaser rates, i.e. temporarily low introductory interest rates. After several years of favorable developments, the downturn in house prices, higher interest payments after the initial low-interest period and the Federal Reserve's monetary tightening stance started to bring about higher default rates on subprime and adjustable rate mortgages. The related fallouts did not, however, remain limited to the U.S. subprime mortgage sector. Given the stepped-up financial innovation and integration in the recent decade, credit and default risks have been transmitted by means of loan securitization and structured products (mainly collateralized debt obligations and asset-backed securities) via the secondary market to other financial market segments (e.g.

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<sup>&</sup>lt;sup>1</sup> This study covers the following Central, Eastern and Southeastern European (CESEE) countries: Bulgaria, the Czech Republic, Hungary, Poland, Romania and Slovakia (CESEE EU Member States), Croatia and Turkey (EU candidate countries) as well as Russia.

<sup>&</sup>lt;sup>2</sup> Cut-off date for data: March 31, 2008.

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prime mortgages, corporate bonds, monoline insurers) and participants (e.g. banks, hedge funds, mutual funds and pension funds, insurance companies) all over the world, partly underpinned by rating agencies' overly positive assessment of these structured products.

Negative spillover effects, i.e. large losses at major international financial institutions, a lack of transparency regarding the level and dispersion of banks' involvement in subprime or subprime-related businesses and their exposure to bank-owned special investment vehicles (off-balance sheet items), higher liquidity risks given disruptions on the interbank market, tightening lending conditions and concerns about a potential credit crunch, increased evidence of a substantial adverse impact on the real economy and the continuous reassessment of risk all contributed to a deepening and widening of the current financial turmoil. As a result, at the time of writing, the financial turmoil closely resembles a major global financial and confidence crisis. On this account, central banks all around the globe stepped in on several occasions since mid-August 2007 to address heightened liquidity pressures in order to (i) ease concerns about an emerging credit crunch, (ii) prevent bank failures and (iii) mitigate the adverse impact of the financial market turmoil on the real economy.

The financial turmoil reached the CESEE region in the second half of 2007, which was a record year in many respects — not only with regard to booming economic growth and historically low unemployment rates, but also

with a view to high external imbalances (i.e. current account deficit and external debt levels) in some countries of the region as well as gradually rising inflapressures (driven by both and demand-side factors). Against this background, the main aim of this study is to assess the impact of the global financial turbulence on CE-SEE financial markets and to highlight possible areas of macroeconomic and financial challenges. The study is organized as follows: Section 2 gives a brief overview of the potential financial channels through which the recent turmoil might affect the CESEE region. Section 3 provides an empirical overview of recent financial market developments in CESEE. Section 4 discusses the implications of these developments for CESEE by deriving some stylized facts against the background of the prevailing macroeconomic setting in the countries under review. Section 5 reviews the policy responses and implications, while section 6 concludes.

# 2 Sources and Channels of Financial Spillovers

Against the background of protracted and deepening financial market turbulence at an international scale, it is interesting to see through which financial channels<sup>4</sup> of contagion this development might affect CESEE economies and financial markets. In fact, the current financial turmoil could hurt the CESEE region through various direct and indirect channels. In this study, we look at the three most important financial channels, two of them being direct and one indirect. The first direct channel relates to a plunge in the prices

<sup>&</sup>lt;sup>4</sup> Via the real economy channel, disruptions might reach CESEE through slowing domestic demand in the U.S.A. and the related slowdown of euro area exports and thus, ultimately, through decreasing euro area demand for goods and services from the CESEE countries. For more details on the impact of the recent financial market turbulence on the real economy, see chapter "Reports" in this Financial Stability Report.

of financial assets in the portfolio of CESEE financial institutions, while the second direct channel reflects the deteriorating investor sentiment toward emerging markets in general and CESEE in particular ("portfolio investor view"), manifesting itself in an increase in risk premiums and/or a decline in, or a sudden stop of, net capital inflows into the region (mainly in CESEE countries with a substantial stock of foreign portfolio investments). Moving on to possible indirect financial channels, the third channel relates to a situation in which the CESEE region is hit, first and foremost, by a severe tightening of global credit conditions that affects the region's major creditors ("strategic investor view") and leads to a slowdown in (or, in the worst case, to a sudden stop of) capital inflows and, subsequently, to an increase in liquidity constraints.

Looking at each of these channels in turn, the CESEE region appears to be largely resilient to the first direct channel of financial vulnerability. According to last quarter and full-year 2007 data reported by large CESEE banking market players, local banks' exposure to subprime or subprime-related assets, i.e. asset-backed securities (ABS) and collateralized debt obligations (CDOs), has been negligible to date. Generally, given the low market penetration by complex financial products and the very small number, or absence, of specialized financial intermediaries (e.g. investment banks), CESEE financial sectors are not sophisticated enough to be affected directly by the subprime crisis. Furthermore, in light of banks' drive to realize their expansion strategies in a highly competitive market environment, they prefer to capitalize on the strong momentum of credit markets in the region and on the more profitable local lending business

rather than to engage in lower-yielding foreign structured products. Given the still low financial penetration levels and relatively high profit margins throughout the CESEE region, this situation will presumably not change much in the years ahead. In light of foreign dominant market position banks' throughout CESEE, an adverse impact might manifest itself only indirectly, i.e. via the involvement of parent banks in subprime or subprime-related business. But given the fact that the CESEE banking markets are dominated by foreign banks with a strong CESEE focus (and thus presumably a limited exposure to subprime or subprime-related assets) and a long-term commitment toward the region, any noise from this direction seems to be limited as well.

The second direct channel, namely a loss of investor confidence with regard to emerging markets, may hit the CESEE region first and foremost via the bond, stock and foreign exchange markets. An increase in risk aversion toward bond markets would not only make financing (both via local and foreign currency bonds) less abundant and more expensive for governments, but would also cause adverse valuation effects for local financial institutions, which in several countries hold large volumes of government bonds. A major equity market slump could potentially have a negative impact on the real economy by inducing higher savings (to "rebuild" the suffered loss in wealth), reducing consumption propensities and slowing investment activity as a result of the postponement of planned capital increases via the stock market. However, in light of foreign investors' predominance on major CESEE stock exchanges and the still relatively small proportion of shares in households' financial assets, the wealth effects of a major stock market correction in

CESEE and a related slowdown in private consumption appear to be rather limited.<sup>5</sup> Moreover, in predominantly bank-based financial systems, like those in the CESEE countries, corporates have so far only marginally tapped the capital market to raise capital. Finally, a loss of investor confidence toward emerging markets could lead to a more or less pronounced weakening of CESEE currencies, which may not only drive up inflation, but also pose a challenge for the banking sector in countries with sizeable indirect credit risk in the form of foreign currency lending to unhedged domestic borrowers. If a lasting depreciation of local currencies occurred, central banks in the region might be forced to hike interest rates to comply with their primary objectives of price stability, which would in turn further weigh on the individual national economies. It should also be noted that a meltdown of equity and local currency bond prices and a weakening of currencies are not likely to be independent phenomena but might reinforce each other, resulting in an accumulation of losses from different market segments.

The third channel, a severe tightening of global credit conditions with the ultimate result of a slowdown of capital inflows to CESEE, might affect CESEE economies and financial markets in manifold ways: First, heightened liquidity pressures might — via a pick-up in global interest rates or credit spreads — drive up the financing costs of external debt (both private and public), which is high and rising in many countries of the

region (price effect). The drying-up of capital inflows into the region (quantity effect) could further exacerbate the rise in funding costs (of both external and domestic debt), cause exchange rate depreciation and would most likely also necessitate an adjustment in consumption and/or investment volumes. However, the risk of a sharp slowdown or reversal of capital inflows into the region seems limited at present, given the large share of stable capital flows, i.e. FDI and intercompany loans.

In this context, it is of relevance that the banking sectors in the CESEE are predominantly foreign owned. Thus, it cannot be excluded that in a worst case scenario, parent banks would be forced to cut back lending altogether (instead of geographically reallocating funds), which would, in turn, also adversely affect their CESEE subsidiaries for which they represent one of the main refinancing sources. Consequently, sharply decelerating credit growth could lead to a slowdown in domestic demand (both consumption and investment) and thus in economic growth. Such a development would predominantly hit countries where the expansion of the domestic deposit base cannot keep pace with credit growth, thus causing banks to rely on foreign funding to finance the expansion of domestic lending. Because of common creditor linkages,6 there could be the risk of regional contagion if one of the foreign banks active in a large number of CESEE countries were to encounter severe liquidity problems. In most cases, however, for-

<sup>&</sup>lt;sup>5</sup> Investments in mutual and pension funds, however, which represent an increasing portion of households' financial assets (and are to a significant extent invested in domestic and foreign bonds and equities), do represent a channel through which households may be affected by asset price losses.

<sup>&</sup>lt;sup>6</sup> Funding to the CESEE region concentrates on a small number of foreign creditor countries from Western Europe (most notably Austria, France, Germany and Italy) which are active in a large number of CESEE countries. As a result, disruptions might take different directions: from headquarters in one country to subsidiaries in several countries or from one of the (larger) subsidiaries to subsidiaries elsewhere via headquarters.

eign banks consider their operations in the CESEE region to be of a long-term strategic nature. Therefore, it is reasonable to expect that parent banks will try to sustain business activities in CESEE to benefit from the opportunities arising from the region's catchingup potential in terms of the scale and scope of banking activities and from generally higher (risk-adjusted) margins. Against this background, a substitution effect in favor of CESEE countries (even at the cost of parent banks' home markets) is possible, should foreign parent banks be forced to ration credit at a group level.

Still on this third channel, increased liquidity constraints could hamper the financing of real estate projects. A substantial change in demand and supply conditions on the real estate market might, in turn, contribute to a collapse of real estate prices, which could have detrimental effects on both consumption and investment. However, for the time being, there is no clear evidence of an emerging house price bubble in CESEE, despite the rapid growth in real estate prices observed in recent years (particularly in Bulgaria and Romania). Consequently, at present a boom-bust scenario in CESEE housing markets appears to be rather limited. In fact, the still prevailing mismatch between housing demand and supply in CESEE and other transition-specific factors<sup>8</sup> (e.g. the poor quality of existing housing stock) are likely to continue to support the construction industry and economic growth. Notwithstanding this benign baseline scenario, it should be noted that there have been signs of a correction of house price dynamics in those CESEE countries or regions (coastal areas, capital cities) where house prices had been increasing most rapidly over the past few years.

# 3 Financial Market Developments: CountrySpecific Factors Matter

The CESEE countries covered in this study have been affected to some extent by the international financial turbulence observed since early July 2007, both in terms of prices and volumes. The adverse international developments impacted different financial market segments to differing extents, although country-specific factors (such as exchange rate regimes or market liquidity) imply that the degree of information content in capital market data varies across countries.

#### 3.1 Money Markets

Money market spreads against the euro area remained broadly stable or even decreased in the initial phase of the financial turmoil, but trended upward more or less strongly all over the region since December 2007 (see chart 1). Among the more advanced CESEE countries, Poland and the Czech Republic saw spreads increase by a relatively moderate 89 and 55 basis points, respectively — a development that was to some extent driven by recurring policy rate hikes. In the Czech Republic, money market rates are still below

<sup>&</sup>lt;sup>7</sup> For example, demand could slow down if nonresidents shied away from further house purchases due to growing economic uncertainties, or if a hard landing of the domestic economy curbed demand by residents (e.g. through a worsening of the income situation). As for supply-side effects, increasing vacancies in some segments of the housing market (owing to the increasing supply overhang from the recent housing boom) or "fire sales" by borrowers or banks (owing to difficulties in the debt servicing of (mortgage) housing loans) could have an adverse effect on house prices.

See Égert and Mihaljek (2007).

euro area levels; the same holds true for Slovakia, where money market spreads were even down by 59 basis points in the period under review. In Hungary spreads remained unchanged from their July 2007 levels, as a 100 basis points fall in spreads in the second half of 2007 was counterbalanced by a spread increase of similar magnitude in the first quarter of 2008, partly as a result of rising political uncertainty ahead of the referendum of early March 2008 on selected measures of the fiscal austerity package introduced in September 2006.

A more pronounced spread increase by nearly 300 basis points was observed in Romania, however. This development was not only driven by a threestep increase in the policy rate (by altogether 200 basis points) in the first quarter of 2008, but also by a pick-up in risk premiums against the background of the country's high and widening external imbalances. In Bulgaria, money market spreads were up by a noticeable 160 basis points owing to waning investor confidence against the backdrop of rising inflationary and current account pressures. Having decreased considerably in the first three quarters of 2007, money market spreads continued to narrow in Turkey since October 2007 (albeit at a somewhat slower pace), despite policy rate cuts by a total of 200 basis points in the same period. This seems to reflect an increase in risk premiums owing to rising political uncertainty. Croatian money market spreads were down 183 basis points against their unusually high precrisis level by end-March 2008.9 Although Croatian money market rates soared again in January given increased need for liquidity at the start of the new mandatory reserve maintenance period, they normalized soon after fading liquidity demand and Hrvatska narodna banka's repeated reverse repo auctions eased liquidity pressures.

#### 3.2 Local Currency Bond Markets

So far, the impact of the international financial turmoil on interest rate spreads of CESEE local currency government bonds against the euro area has been rather limited (see chart 2). Since the onset of the financial turmoil in early July, global emerging market bond spreads have increased by some 105 basis points on average (based on the JPMorgan Government Bond Index for Emerging Markets — GBI-EM). By contrast, the spreads on Slovak local currency-denominated government bonds remained roughly stable at an average of 20 basis points (against euro area government bonds) in the observation period. A somewhat more pronounced increase of 60 to 70 basis points has been recorded in the Czech Republic (starting at a negative spread of 20 basis points) and in Russia. However, this rise in spreads is still much lower than the one observed in Asia (+90 basis points), Latin America (+132 basis points) or the Middle East/ Africa (+116 basis points). Developments in Poland (+100 basis points) were more in line with those in other emerging market regions. Out of the six CESEE countries included in the JPMorgan GBI-EM, only Hungary recorded a rise in government bond spreads (+285 basis points) that was higher than the emerging market aver-

According to Hrvatska narodna banka (HNB), soaring money market spreads in June and July 2007 were driven inter alia by banks' continued strong lending activity, higher demand for liquidity in the run-up to the issuance of the second tranche of a ten-year kuna government bond in July 2007 and the government's preparations for financing the payment of the third installment of debt to pensioners.

Chart 1a

# Three-Month Money Market Spreads against the Euro Area

# Latest observation: March 31, 2008

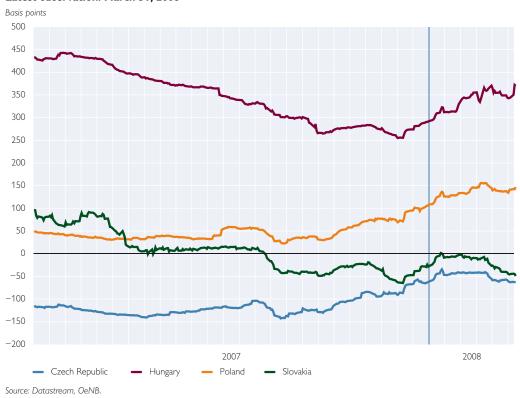
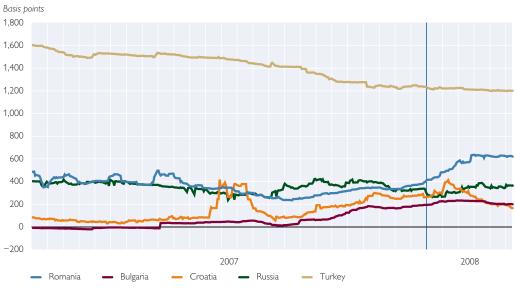


Chart 1b

# Three-Month Money Market Spreads against the Euro Area

#### Latest observation: March 31, 2008

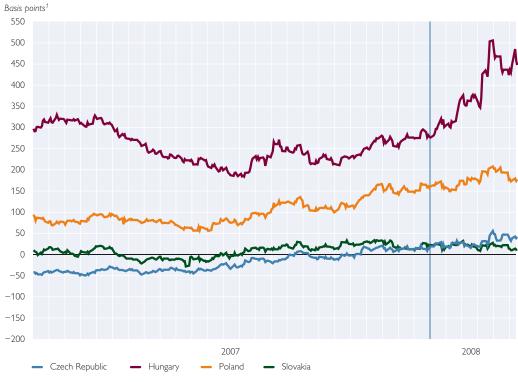


Source: Datastream, OeNB.

Chart 2a

# Spreads on Local Currency Government Bond Yields against the Euro Area

#### Latest observation: March 31, 2008



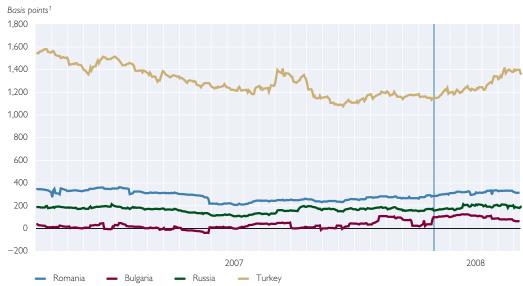
Source: Bloomberg, OeNB.

<sup>1</sup> Country subindices of JPMorgan GBI-EM.

Chart 2b

# Spreads on Local Currency Government Bond Yields against the Euro Area

#### Latest observation: March 31, 2008



Source: Bloomberg, Eurostat, OeNB.

<sup>&</sup>lt;sup>1</sup> Country subindices of JPMorgan GBI-EM for Russia and Turkey, Eurostat data for Bulgaria and Romania.

age. <sup>10</sup> The spreads on Turkish lira-denominated government bonds increased by 150 basis points during the review period, but the picture changes somewhat with end-October 2007 taken as a base date. Having narrowed substantially between mid-September and mid-October 2007, spreads were some 290 basis points higher at the end of March 2008 than at end-October 2007. Spreads in Romania and Bulgaria were up by some 65 and 110 basis points, respectively – figures that are below, or in line with, global emerging market averages.

# 3.3 Foreign Currency Bond Markets

Since the beginning of the financial turbulence, the increase in the spreads on euro-denominated sovereign eurobonds issued by the Czech Republic, Slovakia and Poland has been significantly smaller (15 to 35 basis points) than that in the average emerging market spread (75 basis points, JPMorgan Euro EMBI Global Index). The rise in the spread on Hungarian eurobonds was slightly less pronounced (5 basis points) than that of the average market spread. However, the spreads on Bulgarian, Croatian, Romanian and Turkish eurobonds widened more strongly than the average emerging market spread (by 15, 25, 30 and 35 basis points, respectively). Spreads on Russian U.S. dollar-denominated eurobonds widened by 100 basis points, less pronouncedly than the overall market (143 basis points, JPMorgan EMBI Global Index). Common to all countries is the significant pick-up in spreads on euro-denominated sovereign eurobond yields since end-February 2008, with the most pronounced increases observable in Turkey, Hungary and Bulgaria (see chart 3). Rising political and/or economic risks and – in the case of Hungary and Bulgaria – downgrades of the rating outlooks on long-term foreign currency debt by major rating agencies presumably underpinned this development.<sup>11</sup>

Despite temporary declines, fiveyear credit default swap (CDS) spreads have widened markedly since end-June 2007, in particular since mid-December 2007 (see chart 4).<sup>12</sup> Similarly to the developments seen in the case of eurobond spreads, Czech, Slovak and Polish CDS spreads were affected the least by the financial turmoil: Their relatively modest 45 to 65 basis point rise most likely resulted partly from rating upgrades in all three countries at end-February and in early March. More prominent increases were observed in Russia (+105 basis points) and Croatia (+115 basis points). Again, CDS spreads rose particularly strongly (by 160 to 185 basis points) in countries with large macroeconomic imbalances, i.e. Hungary, Bulgaria, Romania and Turkey. A

When comparing government bond spreads against the euro area in European and non-European emerging markets, it is important to bear in mind that non-European emerging market bonds (denominated in local currencies) may be benchmarked against U.S. bonds rather than against euro area bonds. Given the significant decline in the spread between U.S. and euro area government bond yields, the increase in bond spreads against euro area bonds may hence understate the increase in risk premiums in those bonds that are benchmarked against U.S. bonds.

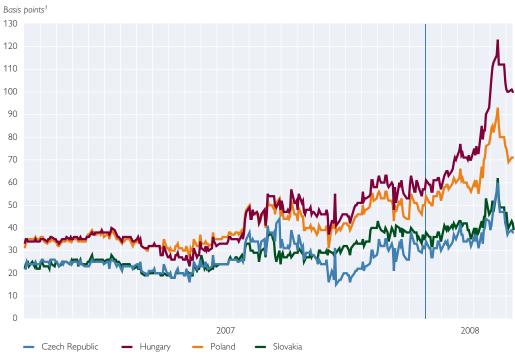
In early 2008 Fitch revised the rating outlook for Bulgaria downward from stable to negative and Standard & Poor's downgraded the outlook for Hungary from neutral to negative. Similarly, Standard & Poor's and Fitch downgraded Romania's outlook from stable to negative in November 2007 and January 2008, respectively. By contrast, rating agencies upgraded the country rating for the Czech Republic (to A (Standard & Poor's)) and to A+ (Fitch)) and the outlook for the Slovak Republic (from stable to positive (Standard & Poor's)), Poland (from stable to positive (Standard & Poor's)).

<sup>&</sup>lt;sup>12</sup> However, it should be noted that in times of turbulence reduction in market liquidity for this instrument may impair the information content of CDS pricing.

Chart 3a

# **Spreads on Euro-Denominated Eurobond Yields**

#### Latest observation: March 31, 2008



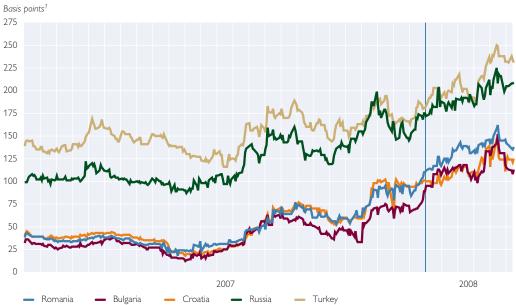
Source: Bloomberg, OeNB.

<sup>1</sup> JPMorgan Euro EMBI Global Index

Chart 3b

# **Spreads on Euro-Denominated Eurobond Yields**

# Latest observation: March 31, 2008



Source: Bloomberg, Eurostat, OeNB.

<sup>1</sup> JPMorgan Euro EMBI Global Index, for Russia JPMorgan EMBI Global Index.

Chart 4a

# **Spreads on Sovereign Five-Year Credit Default Swaps**

#### Latest observation: March 31, 2008

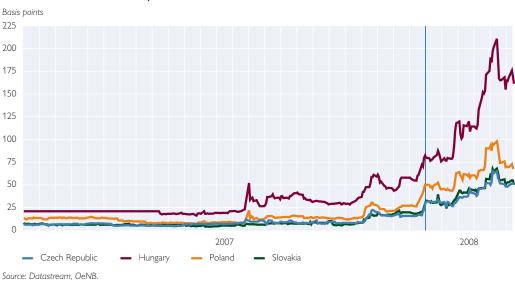
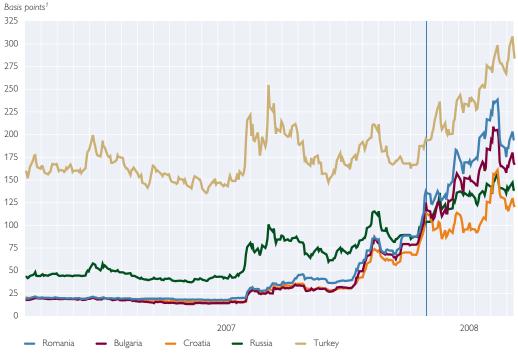


Chart 4b

# **Spreads on Sovereign Five-Year Credit Default Swaps**

#### Latest observation: March 31, 2008



Source: Datastream, OeNB.

 $<sup>^{\</sup>rm 1}$  Data on Bulgaria and Russia are based on the U.S. dollar.

comparison with other emerging countries does not allow for clear conclusions, as CDS spread developments e.g. in Thailand (+72 basis points), China (+69 basis points) and Brazil (+100 basis points) were more favorable than in many CESEE countries, while those in other emerging countries were in line with CESEE developments (e.g. in South Africa: +180 basis points) or less favorable (e.g. in Argentina: +344 basis points).

#### 3.4 Stock Markets

CESEE stock markets have to a large extent followed developments in global equity markets, which have been hit by several waves of stock market corrections since mid-2007 (see chart 5). The most pronounced setbacks occurred in July and November 2007 as well as in January 2008. Although the region suffered sharp corrections in equity prices in recent months, by international comparison CESEE stock markets have weathered the global equity market turbulence fairly well. Despite a high degree of intraregional heterogeneity, the stock indices in the CESEE region (as captured by the MSCI EM Eastern Europe (MSCI EMEE) index) performed much better than leading stock indices in the U.S.A. or Europe. In the period under review (June 29, 2007 to March 31, 2008), the MSCI EMEE index even recorded a minor increase of 0.6% based on the reference date, while the Dow Jones Industrial Average fell by 8.5% and the EURO STOXX suffered a loss of over 20% during the same period. But CESEE stood its ground in an emerging market context as well. On this note, stock market developments in CESEE were not only in line with those in global emerging markets (+0.7%), but also superior to those in Emerging Asia (-0.4%) and the Middle East/Africa (-0.1%). Among world emerging markets, only Latin America (+5%) seems to have performed somewhat better than CESEE.

Stock market developments within the CESEE region diverged in recent months. The Slovak stock exchange has weathered the financial turmoil practically unscratched and even recorded a small increase by 3.3% since the beginning of 2008 – most likely owing to positive investor sentiment regarding the country's prospective entry into the euro area in 2009. At the same time, Bulgaria, Croatia, Romania and Turkey witnessed the most pronounced downward corrections, all suffering equity price losses of 25% to 30%. While growing political uncertainties seem to have enforced this development in Turkey, the current setback in Croatia should be seen in the context of recent years' stock market rallies. Bulgaria and Romania seem to have felt the adverse global investor sentiment the most, with investors becoming increasingly cautious given high and rising domestic and external economic imbalances in both countries. Stock market prices in the Czech Republic, Hungary and Poland have contracted by an (unweighted) average of 15% since January 1, 2008 - a loss which is somewhat higher than the one registered by the Dow Jones Industrial Average in the same period, but comparable to or smaller than those seen in other emerging markets (e.g. Emerging Asia) and Western Europe, respectively. The drop in the Russian RTS index was even less pronounced (-10.3%), with the current boom in raw materials in part backing the Russian stock market.

Chart 5a

#### **Stock Market Indices**

#### Latest observation: March 31, 2008



Chart 5b

#### **Stock Market Indices**

#### Latest observation: March 31, 2008



# 3.5 Foreign Exchange Markets

In line with stock market developments, CESEE currencies have been affected by the international financial market turbulence in three major waves since the onset of the turmoil (see chart 6). Since end-June 2007, the Romanian leu, the Turkish lira and the Hungarian forint have suffered the strongest impact, having lost around 16.3%, 14.2% and 5.2% against the euro, respectively, by the end of the first quarter of 2008. Adverse country-specific factors, such as political uncertainty (Turkey) and/or more or less pronounced economic imbalances (e.g. Hungary, Romania), made these countries particularly vulnerable to exchange rate corrections.

Chart 6a

## Development of Exchange Rates against the Euro<sup>1</sup>

#### Latest observation: March 31, 2008



Source: Eurostat, OeNB

Chart 6b

## Development of Exchange Rates against the Euro<sup>1</sup>

# Latest observation: March 31, 2008



Source: Eurostat, OeNB.

However, especially the Romanian leu and the Turkish lira had undergone sizeable nominal appreciations over the twelve months to mid-2007. In Hungary, despite high exchange rate volatility, downward pressures on the forint seem to have eased following the adoption of a free floating exchange rate regime as of February 26, 2008. The Russian ruble lost around 6.6% against the euro in the period under review, while it appreciated by about 8.7% against the U.S. dollar, its major reference currency, and thus kept appreciating slightly (by some 2%) against its currency basket.<sup>13</sup> By international

<sup>&</sup>lt;sup>1</sup> An increase in value means a nominal appreciation.

An increase in value means a nominal appreciation.

 $<sup>^{13}</sup>$  It should be noted, however, that in mid-August - given heightened liquidity pressures in the Russian banking system — the Bank of Russia provided liquidity support to banks totaling some USD 20 billion and supported the Russian ruble by repeated foreign exchange rate interventions.

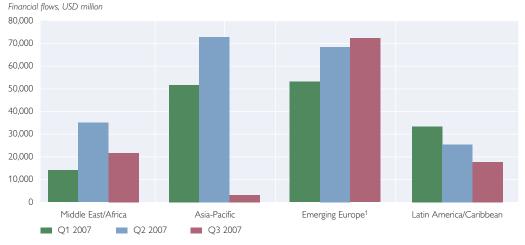
comparison, any exchange rate losses (against the euro) of CESEE countries have been considerably smaller since the onset of the financial turmoil than those suffered by other emerging markets.<sup>14</sup>

Remarkably, the Czech koruna, the Polish zloty and the Slovak koruna have withstood the regional downward pressures, and have even gradually appreciated (more or less strongly) since early July 2007. In the case of the Czech Republic, this appreciation is likely to have been the result of the Czech koruna's role as a funding currency of carry trades and the ensuing unwinding of such trades during the financial market turbulence. The monetary tightening seen in the observation period might have added to this development as well. The Polish zloty has appreciated con-

siderably since October 2007, in line with increased foreign investor confidence driven by the prospect of a more liberal economic course following a change in government. Similarly the Slovak koruna has strengthened considerably since end-January 2008, mainly on the back of market expectations regarding a possible revaluation of the Slovak koruna's ERM II central rate in the run-up to the country's targeted entry into the euro area at the beginning of 2009. Under their prevailing exchange rate regimes, the Croatian kuna (tightly managed float with the euro as an anchor currency) and the Bulgarian lev (currency board against the euro) remained practically unaffected by the global financial market turbulence.

Chart 7

## **Claims of BIS Reporting Banks on Developing Countries**



Source: BIS.

<sup>1</sup> Emerging Europe includes the Baltics, Southeastern Europe, CIS Europe and Turkey.

<sup>&</sup>lt;sup>14</sup> In the period under review, the South African rand lost 25.4% in value, while the Argentine peso and the Thai baht depreciated by 16.9% and 14.4%, respectively. Moreover, most CESEE currencies have even recorded much smaller losses than the currencies of more developed economies, such as the Icelandic króna (30.7%) or the New Zealand dollar (-12.8%). In this comparison, it is important to note that the currencies of several non-European emerging countries are benchmarked to the U.S. dollar rather than to the euro and that the comparably steeper depreciation of these currencies against the euro in part reflected the movements of the EUR/USD exchange rate.

#### 3.6 The Volume of Financial Flows

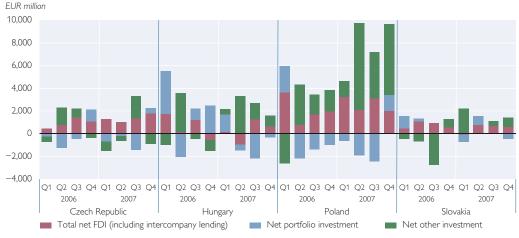
According to data available from the Bank for International Settlements (BIS) for the first three quarters of 2007 (see chart 7), total financial flows into developing economies have fallen sharply, in terms of volumes, from over USD 200 billion in the second quarter of 2007 to USD 115 billion in the third quarter. However, while financial flows to the Middle East/Africa, Asia-Pacific

and Latin America/the Caribbean dropped dramatically in the third quarter of 2007, they increased in Emerging Europe, which received some two-thirds of the total financial flows directed to developing economies.

Available balance of payments data for the fourth quarter of 2007 do not indicate reduced capital inflows (see chart 8) either, even though in some countries a change in the maturity

Chart 8a

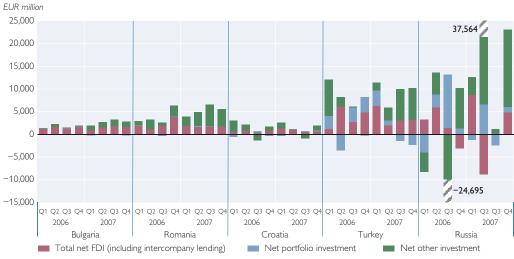
#### Financial Flows: FDI, Portfolio Investment and Other Investment



Source: National statistical offices

Chart 8b

#### Financial Flows: FDI, Portfolio Investment and Other Investment



Source: National statistical offices

structure of financial inflows was observable given a shift toward more short-term flows. Quarterly data of financial flows (FDI, portfolio investment, other investment) up to the fourth quarter of 2007 point partially to a somewhat higher volatility of financial flows in recent months, albeit following a protracted period of heavy capital inflows. In particular, stronger movements of inflows and outflows of portfolio and other investment were observable whereas net FDI inflows remained more or less unchanged.<sup>15</sup>

# 4 Implications of Recent Financial Market Developments for CESEE

So far, financial market developments in CESEE do not provide strong indication for a massive worsening in investor sentiment specifically toward CESEE, neither with respect to asset prices nor with respect to volumes. In general, CESEE markets tended to follow the negative global investor sentiment, but performed relatively well compared to other emerging markets. Less pronounced direct economic ties with the U.S.A., the "EU/euro area halo" effect<sup>16</sup> and the sustained good medium-term economic prospects of the region (despite rising economic imbalances in some countries) still seem to bolster investors' confidence in the region. Within the region, countries with the largest economic imbalances and/ or insufficient policy credibility as well as countries which had previously experienced strong capital inflows coupled with particularly high asset valuation were affected more than others by the financial turmoil, implying increased differentiation by foreign investors.

Table 1

# **Key Indicators of External and Financial Vulnerability**

	Combined current and capital account balance <sup>1</sup>		FDI coverage of the com- bined current and capital account deficit in %		Total gross external debt <sup>1, 2</sup>		Reserve assets <sup>1, 2</sup>		Growth of credit to the real sector <sup>3</sup>		Foreign currency lending⁴		GDP <sup>3</sup>		Inflation <sup>5</sup>	
	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007
Bulgaria	-17.1	-20.3	135.1	100.7	80.7	97.3	32.9	38.8	15.4	48.5	45.1	50.0	6.3	6.2	6.1	11.4
Czech Republic	-2.9	-2.4	113.2	173.0	38.1	39.5	20.8	18.4	17.5	22.3	10.4	9.1	6.4	6.5	1.5	5.1
Hungary	-5.3	-4.0	52.5	26.0	91.4	96.5	18.2	16.2	15.7	7.4	49.6	57.2	3.9	1.3	6.6	7.2
Poland	-2.6	-2.6	113.0	148.7	46.5	50.7	12.9	13.9	19.5	29.0	27.0	24.2	6.2	6.5	1.4	3.7
Romania	-10.5	-13.2	85.1	44.1	28.0	27.9	21.8	20.9	45.4	48.1	47.4	54.3	7.9	6.0	4.9	6.8
Slovakia	-7.1	-4.8	95.5	74.9	54.8	54.9	21.6	22.6	21.7	19.2	20.0	21.3	8.5	10.4	3.7	2.3
Croatia	-8.1	-8.4	93.0	101.8	85.6	87.8	25.5	24.8	18.4	13.0	71.7	61.4	4.8	5.6	2.0	4.6
Turkey	-6.1	-5.8	58.0	52.5	37.3	35.0	11.1	10.4	40.9	17.1	13.5	10.6	6.9	4.5	9.7	8.4
Russia	9.6	5.3	–10.0	-9.9	30.3	26.6	31.0	33.7	34.2	40.0	22.1	20.1	7.3	8.1	9.0	11.6

Source: Eurostat, national central banks, national statistical offices.

<sup>1 %</sup> of GDP.

<sup>&</sup>lt;sup>2</sup> End of period.

<sup>&</sup>lt;sup>3</sup> Year on year change in %. The real sector comprises credit to the nonbank nongovernment sector.

<sup>&</sup>lt;sup>4</sup> Share of foreign currency loans in loans to the nongovernment sector in %.

<sup>&</sup>lt;sup>5</sup> December, year on year change in %.

<sup>&</sup>lt;sup>15</sup> In some cases, however, FDI inflows were determined by large privatization projects (e.g. the takeover of the Romanian Banca Comerciala Romana (BCR) by the Austrian Erste Bank Group) that resulted in strong capital movements.

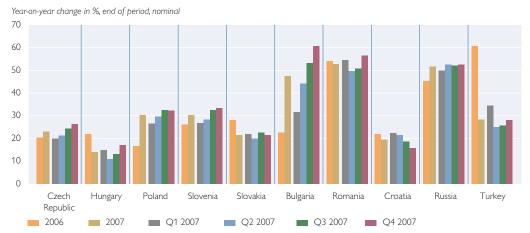
<sup>&</sup>lt;sup>16</sup> See Luengnaruemitchai and Schadler (2007).

A closer look at key indicators of economic vulnerability (see table 1) indicates that the position of the two Southeastern European EU Member States, Bulgaria and Romania, as well as that of the EU candidate countries Croatia and Turkey is weaker than that of the other countries in the region. Among the Central European economies, Hungary stands out negatively, given its weak growth performance and other less favorable economic fundamentals (e.g. inflation, external position). In these countries high external imbalances in the form of considerable deficits on the combined current and capital accounts go hand in hand with substantial external financing needs. As a result, Bulgaria, Hungary and Croatia have accumulated fairly high levels of gross external debt. Noteworthy, in some countries (particularly in Bulgaria, Hungary, Romania and Croatia) the corporate sector's dependence on external financing sources is relatively strong. In this context, recent downgrades by major rating agencies (e.g. regarding Bulgaria, Romania, and Hungary) could possibly aggravate external vulnerabilities in the respective countries.<sup>17</sup> In addition, given signs of economic overheating in Bulgaria and Romania, domestic economic imbalances are increasing as well, as is manifest from mounting core inflationary pressures, tight labor market conditions, brisk credit growth and (in Romania) lax fiscal policies. Relatively high and increasing foreign exchange reserves, however, indicate sustained capital inflows and can provide significant cushion against external shocks. Similarly, low public debt levels in most countries and a more mature institutional setting (as compared to the early years of transition) might bolster investor confidence in the region.

In the Southeastern EU Member States and in the EU candidate countries, high credit growth — often refinanced by banks abroad (mainly parent institutions) and potentially used for nonproductive purposes like consumption or house construction — has added to domestic and external imbalances. With households and nonbank corpora-

Chart 9

# **Domestic Credit to Nonbank Nongovernment Residents**



Source: National central banks, OeNB,

<sup>&</sup>lt;sup>17</sup> See Kim and Wu (2008).

tions having rapidly accumulated debt over the past few years, possibly based on overoptimistic income expectations, a significant slowdown in foreign financing and the subsequent economic downturn may undermine these expectations and lead to debt servicing difficulties. However, the latest data on the development of credit growth to the private sector do not yet indicate a widespread change in banks' lending behavior in response to the global financial market turbulence. In most countries, credit growth even accelerated in the second half of 2007 in nominal terms (see chart 9). A notable exception is Croatia, where credit growth decelerated gradually in 2007 owing to the additional prudential and administrative measures introduced by the central bank with a view to reducing the country's high and rising external imbalances.

In many countries in addition to cross-border foreign currency borrowing by nonbank corporations the high share of foreign currencies in domestic lending (predominantly euro and Swiss franc) represents a further risk in case of a lasting and substantial depreciation of the domestic currencies. In this respect, only Croatia and Poland seem to have registered some slowdown in foreign currency lending as a consequence of administrative and prudential measures or central bank guidance.

# 5 Policy Response and Implications

Since CESEE financial markets have so far weathered the recent global turbulence fairly well, none of the central banks of the countries covered in this study (with the exception of the Bank of Russia) had to provide liquidity support to the banking system.<sup>18</sup> Similarly, none of the countries has so far eased its monetary policy stance via interest rate cuts to offset any potential negative effects of the financial turmoil on economic activity. On the contrary, many central banks in the region (e.g. in the Czech Republic, Hungary, Poland, Romania and Russia) have already tightened their monetary policies (see chart 10) in response to re-emerging inflationary pressures over the final months of 2007, while Slovakia kept its key policy rate stable for the time being. A notable exception, however, is the Turkish central bank, which has lowered its policy rate by a total of 225 basis points since mid-2007, albeit starting from a very high base given the relatively tight monetary conditions prevailing since mid-2006. In some countries, monetary conditions have been additionally tightened by exchange rate appreciation (most notably in the Czech Republic, Slovakia, and Poland).

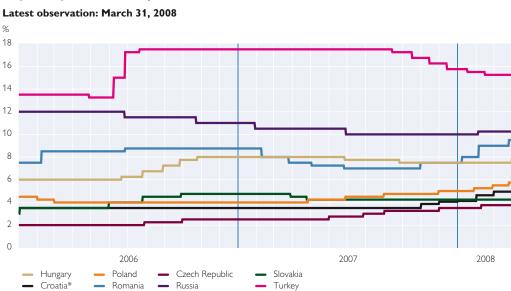
But even if inflation pressures were lower, the scope for monetary policy to accommodate a shock would seem to be modest in many CESEE countries. First, in light of fixed (Bulgaria) or quasi-fixed (Croatia) exchange rate regimes and ERM II participation (Slovakia), CESEE central banks' room for monetary policy maneuvering is limited. Second, in some countries of the region the high degree of currency substitution constrains the effectiveness of the interest rate channel as a monetary transmission mechanism.

Fiscal policy in the region has not reacted to the current financial turmoil

<sup>&</sup>lt;sup>18</sup> Given many Russian banks' heavy reliance on the interbank market and increasingly tight liquidity conditions in the initial phase of the financial turmoil, the Bank of Russia not only provided liquidity support (mainly in August 2007), but also temporarily lowered the minimum reserve rate and reduced the amount of collateral required from commercial banks that use its lending facilities.

Chart 10

#### **Key Policy Rate Developments in CESEE**



Source: National central banks

Note: \*Weighted monthly averages of weighted repo rates achieved at regular reverse repo auctions of the HNB

and the worsening of external economic and financial market conditions. Improvements in the fiscal balances in 2007 were largely driven by cyclical developments (i.e. revenue overperformance), while the underlying fiscal stance has tended to be procyclical in most countries. Given large and increasing external and/or internal imbalances in most countries and rather weak structural budget positions in some of them, the room for fiscal policy to cope with increased macroeconomic risks appears to be limited. It should also be noted that there is hardly any room for an income policy stimulus to support consumption, considering recent rapid wage growth which led to an acceleration of unit labor cost dynamics in many of the countries.

#### 6 Conclusion

Major disruptions originating from the U.S. subprime crisis have shaken financial markets worldwide in several waves since July 2007. During these turbulent times, CESEE financial markets

have also been affected to some extent by global financial market developments — an indication that CESEE's financial market integration into European and global structures has deepened in recent years. However, given the fact that the global financial turmoil is still ongoing and many underlying real and financial data are published with a more or less considerable time lag, it is not yet possible to fully assess the impact of the financial turmoil on CESEE. Nevertheless, a few preliminary conclusions can already be drawn from recent developments.

For CESEE, the risk of a direct spillover of a U.S. economic slowdown seems rather low. However, if an economic downturn in the U.S.A. caused a marked slowdown in euro area growth, exports and current account positions of CESEE countries would be adversely affected. Risk propagation through financial market linkages could be expected to play a more prominent role and manifest itself in an increase in funding costs and/or a decrease in

financial flows. These risks could be triggered by a further reduction of risk appetite toward emerging markets in general or Emerging Europe in particular, or if foreign parent banks in the mostly foreign-owned banking systems of the CESEE countries were forced to seriously cut back lending. In this respect, the concentration of foreign creditors on a few Western European countries (most notably Austria, France, Germany and Italy) active throughout the region could, in the worst case, drive up the risk of contagion.

Against this background and despite major corrections in all financial market segments, CESEE financial markets so far seem to have weathered relatively well the international financial market turbulence that started in July 2007 and was accompanied by a tightening of global liquidity conditions and the repricing of risk. In general, asset price losses and increases in risk premiums were contained in the region. However, developments were not homogenous, with countries and financial market segments being hit by the turmoil to different extents. In line with expectations, the countries with the largest economic imbalances and/or insufficient policy credibility as well as countries which had previously experienced strong capital inflows coupled with strong rises in asset valuations and buoyant aggregate demand (Hungary,

Romania, Bulgaria, Croatia, Turkey and Russia) felt the strongest impact. However, it should be borne in mind that country-specific factors may compromise the information content of capital market data and conceal underlying market pressure. The performance of some market indicators (e.g. spreads on local currency-denominated bonds in Hungary, exchange rate in Romania) suggests that market participants have started to place more emphasis on country-specific signs of economic vulnerability. Thus, if international market turbulence persists or strengthens further, this would exert additional pressure on countries with relatively weaker macrofundamentals. Therefore, bringing back existing (in particular external) imbalances to more sustainable levels in the near future remains a precondition for preventing the loss of investor confidence in a relatively fragile international environment that is characterized by a more permanent reassessment of risks. At the same time, for some countries growing liquidity constraints – as long as the process is orderly and does not turn disruptive – could help contain overheating pressures and thus put economic growth and convergence on a sounder footing and provide an incentive for pushing forward with crucial economic reforms in the face of worsening financing conditions.

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