Continued Financial Turmoil Dampens Global Economic Outlook

Industrialized Countries: Growth Decreases as Inflation Increases, International Financial Market Turbulence Continues

Effects of the U.S. Subprime Crisis and Higher Inflation

Economic growth slowed down in the *industrialized countries* in the fourth quarter of 2007. In April 2008, the IMF revised its growth forecast significantly downward against October 2007. It now expects substantially weaker growth rates than in previous years owing to weak economic developments in the U.S.A and the turmoil in international financial markets, whereas this year's rate of inflation is expected to be both higher than in 2007 and higher than forecast in October 2007 (see table 1). Since August 2007, higher food and crude oil prices have clearly driven up inflation rates in many countries. In early April 2008, the price of Brent crude oil reached around USD 110 per barrel. According to the IMF, the financial turmoil, which set off in the summer of 2007, has intensified and represents a cyclical risk. In the past months, many financial institutions had to make high loan loss provisions for (mainly securitized) claims on subprime U.S. mortgage debtors and for other securitizations. A number of institutions needed to raise capital to strengthen their capital base. Some systemically important institutions experienced liquidity shortfalls and, in part, had to be backed by their respective central banks.

In the *U.S.A.* in the fourth quarter of 2007, real GDP growth was higher year on year (at a rate of 2.8%) than the year's average, but the seasonally adjusted and annualized quarter-on-quarter growth rate of 0.6% was significantly lower than in the previous quarter, when it stood at 4.9%. In the first quarter of 2008, quarter-on-quarter real GDP growth was also 0.6%. A series of short-term economic indicators, at best, point to only weak growth in the first quarter of 2008. In view of declining real estate investments, tighter borrowing conditions and an in-

Table 1

IMF World Economic Outlook: Industrialized Countries

	GDP (real change)					Consumer price inflation				Current account		
	Apr. 08	Oct. 07	Apr. 08		Change in outlook	Apr. 08	Oct. 07	Apr. 08		Apr. 08		
	2007	2008[1]	2008[1]	2009[1]	2008[1]	2007	2008[1]	2008[1]	2009[1]	2007	2008[1]	2009[1]
	%					%				*% of GDP*		
Industrialized countries	2.7	2.2	1.3	1.3	−0.9	2.2	2.0	2.6	2.0	−1.2	−1.1	**−1.1**
U.S.A.	2.2	1.9	0.5	0.6	−1.4	2.9	2.3	3.0	2.0	−5.3	−4.3	**−4.2**
Euro area	2.6	2.1	1.4	1.2	−0.7	2.1	2.0	2.8	1.9	−0.2	−0.7	**−0.9**
Germany	2.5	2.0	1.4	1.0	−0.6	2.3	1.8	2.5	1.6	5.6	5.2	4.9
France	1.9	2.0	1.4	1.2	−0.6	1.6	1.8	2.5	1.7	−1.3	−2.4	−2.5
Italy	1.5	1.3	0.3	0.3	−1.0	2.0	1.9	2.5	1.9	−2.2	−2.4	−2.3
United Kingdom	3.1	2.3	1.6	1.6	−0.7	2.3	2.0	2.5	2.1	4.9	4.0	**3.9**
Japan	2.1	1.7	1.4	1.5	−0.3	0.0	0.5	0.6	1.3	−4.9	−4.8	**−4.4**

Source: IMF (World Economic Outlook), October 2007 and April 2008.

[1] *Forecast.*

creasing unemployment rate, economic growth prospects in the U.S.A. have deteriorated noticeably. The IMF sees growth at merely 0.5% in 2008, and 0.6% in 2009, despite stimulating monetary and fiscal policy incentives. Other forecasts, however, expect growth to slow down at a less pronounced rate and the U.S. economy to recover more quickly. The broad range of growth rate forecasts illustrates the existing uncertainties about the extent of the economic slump in the U.S.A. In February 2008, core inflation was 2.3% year on year, whereas the consumer price index rose by 4%. However, the IMF expects inflation to recede to an annual average of 3% in 2008.

In the *euro area*, economic growth declined sharply toward end-2007, coming to no more than 2.2% year on year in the fourth quarter of 2007. Various short-term economic indicators point to moderate economic growth in the first quarter of 2008. The IMF expects euro area economic growth to cool off significantly in 2008 and 2009, and has revised its respective forecast downward, albeit not to the same extent as for the U.S.A. Other forecasts for the euro area are slightly more optimistic, especially for 2009. HICP inflation went up to 3.6% in March 2008, thus reaching a record high since the beginning of monetary union. However, the IMF expects inflation to decline again in 2008, namely to an annual average of 2.8%. Survey-based leading indicators have not yet signaled a marked slowdown of the so-far robust economic growth in *Germany*. Like the IMF, German research institutes expect an – albeit less pronounced – slowdown in economic growth for the current year. Net exports and investments will contribute less, while private consumption is likely to support growth. For France, the IMF also expects growth to slow down primarily on account of net exports, which will turn from slightly positive to slightly negative.

In *Japan*, year-on-year real GDP growth in the fourth quarter of 2007 (1.7%) was also lower than the year's average. In the first months of 2008, economic growth diminished further. Expecting growth in Japan to slow down in 2008, albeit to a lesser extent than in the euro area, the IMF revised its forecast for Japan slightly downward. The Japanese consumer price index rose by 1.0% year on year in February 2008.

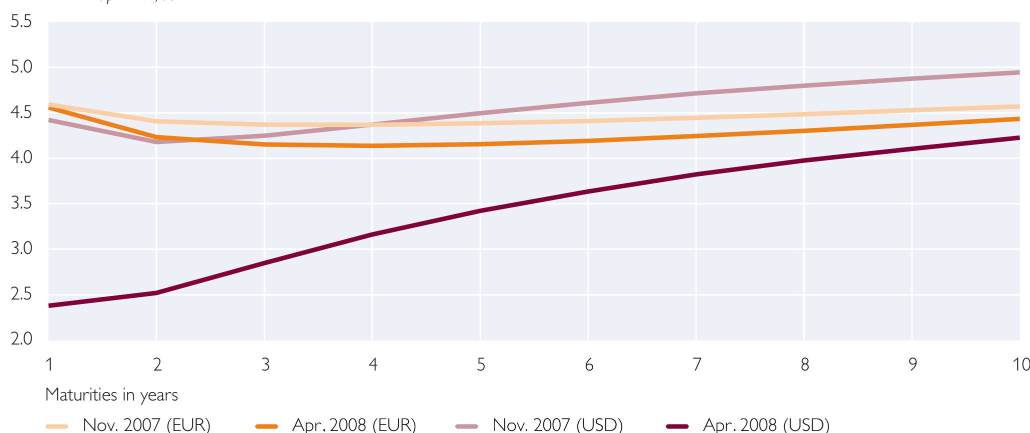
Substantial Interest Rate Cuts in the U.S.A., Financial Turmoil Continues

In view of the financial turmoil and the weakening economic development, the U.S. Federal Reserve slashed its key interest rate by a total of 3¼ percentage points to 2% in seven consecutive steps between September 18, 2007, and May 1, 2008. In the euro area, the ECB left its key interest rate unchanged at 4% despite continuing upside risks to price stability on account of higher uncertainties about euro area growth prospects. Owing to the international financial turbulence observable since August 2007, *money markets* have been tense in several currencies – a situation which has affected interbank trading. These tensions could well be a result of financial institutions' increased preference for liquid funds and higher uncertainties about the distribution of valuation losses linked to structured credit products across the financial system. To counteract said money market tensions, the Federal Reserve, the ECB and the Bank of England took a series of – partly coordinated – liquidity management measures. Although these measures contributed substantially to stabilizing money markets, so far they

Chart 1

Euro Area and U.S. Yield Curves

Based on swap rates, %



Source: Thomson Financial, OeNB.

have not sustainably reduced the volatility of long-term money market rates. The three-month EURIBOR increased by approximately 10 basis points to 4.8% from November 2007 to April 2008, while the U.S. dollar three-month LIBOR decreased by 220 basis points to 2.7%.

In the U.S.A., the *capital market yield curve* shifted downward noticeably. Between November 2007 and April 2008, one-year swap rates declined by approximately 200 basis points, while ten-year swap rates decreased by approximately 70 basis points – a movement which meanwhile has resulted in the yield curve again showing a rising profile also in the one- to two-year segment. The decline in interest rates reflects the Federal Reserve's key interest rate cuts, sharply deteriorating growth prospects as well as investors' higher risk aversion and preference for liquid funds in view of the international financial turmoil. In the euro area, the yield curve shifted downward by 10 to 20 basis points and remained slightly inverted in the one- to four-year range.

Investors' higher risk aversion and preference for liquid funds also showed in the long-term *government bond* markets. In the euro area, yield spreads against German bonds widened noticeably. Break-even inflation rates derived from inflation-indexed bonds, however, remained stable on the whole in the euro area and the U.S.A.

Risk premiums on corporate bonds issued by top-rated debtors (AAA rating) and less highly rated issuers (BBB rating) increased further. In the euro area and in the U.S.A., BBB risk premiums augmented by approximately 120 basis points between November 2007 and April 2008. For top-rated debtors, risk premiums went up by around 10 basis points in the euro area and around 70 basis points in the U.S.A. The period of low risk premiums on corporate bonds issued by lower-rated debtors, as observed from 2003 to mid-2007, appears to have come to an at least temporary end. Ten-year swap spreads were volatile, but while in the euro area, their level had hardly changed by April 2008 as compared to November 2007, they had slightly narrowed at a higher level in the U.S.A.

On euro area and U.S. *stock markets*, prices plummeted in January 2008 on account of growing concerns about the economic situation emanating from the U.S.A. and investors' higher risk aversion; stock price losses in the euro area were noticeably greater than in the U.S.A. Greater stock market uncertainties also became apparent in the development of implied volatility (derived from the prices of options on futures on broad-based stock market indices), which increased in the U.S.A. as well as in the euro area.

On the *foreign exchange markets*, the economic slowdown and markedly decreasing interest rates in the U.S.A. caused the U.S. dollar to weaken. Consequently, between November 2007 and April 2008, the U.S. currency lost approximately 7% to 8% against the euro and the Japanese yen. The euro topped out, reaching a record high of around USD 1.59 per euro. The euro also gained roughly 12% against the pound sterling, which depreciated in the wake of the economic slowdown in the United Kingdom and concerns about the British financial system, peaking at an unprecedented rate of around GBP 0.80 per euro. The Swiss franc gained some 5% against the euro, with exchange rate movements correlating closely with the stock market development.

Emerging Markets: Growth Is Expected to Weaken, but Remain Robust while Net Capital Inflows to the Private Sector Are Expected to Contract

Economic Activity Remains Robust while Consumer Prices Go Up

The IMF expects real GDP in emerging market economies (EMEs) and developing countries (DCs) to climb by 6.7% and 6.6%, respectively, in 2008 and 2009. While remaining below the comparable rates of previous years, these expansion rates are still higher than the long-term average. From a regional perspective, growth in 2008 is likely to be strongest in *Asia* and the *Commonwealth of Independent States (CIS)* – like in 2007. At the same time, however, the IMF also expects these regions, followed by *Europe* and *Latin America*, to record the most significant economic slowdown in 2008, while economic growth in the *Middle East* and in *Africa* (particularly given developments in Nigeria) is expected to accelerate slightly.

In *Asia*, growth contributions are anticipated to shift from slackening growth of exports to industrialized countries toward domestic growth and intra-Asian exports. For China, the IMF expects authorities' efforts to curb high investment demand by taking a tighter credit and monetary policy stance to be partially successful. (However, in April the Chinese statistics authorities revised their estimate for 2007 growth upward from 11.4% to 11.9%.) Also in *Latin America*, economic growth in 2008 will rely more on the domestic economy, in spite of a more restrictive monetary policy. In *Africa*[1], growth is fueled particularly by the oil-exporting countries, which are expected to expand by more than 8% per year in the period from 2007 to 2009. However, also the economies of the oil-importing countries appear set to grow by more than 5% per year in 2008 and 2009, as in 2007. Altogether, the IMF states that these countries have made progress in diversifying their economies and kept up the momentum of structural reform. Also in the *Middle East*, the strong (above-average) economic growth of

[1] *Excluding Libya and Egypt, which are subsumed under the Middle East.*

Table 2

IMF World Economic Outlook: Emerging Market Economies and Developing Countries

	GDP (real change)					Inflation			Current account		
	Apr. 08	Oct. 07	Apr. 08		Change in outlook	Apr. 08			Apr. 08		
	2007	2008[2]	2008[2]	2009[2]	2008[2]	2007	2008[2]	2009[2]	2007	2008[2]	2009[2]
	%					%			*% of GDP*		
All EMEs and DCs	**7.9**	**7.4**	**6.7**	**6.6**	**−0.7**	**6.4**	**7.4**	**5.7**	**4.2**	**4.1**	**3.4**
Europe	**5.8**	**5.2**	**4.4**	**4.3**	**−0.8**	**5.7**	**6.4**	**4.3**	**−6.6**	**−7.2**	**−6.9**
Poland	6.5	5.3	4.9	4.5	−0.4	2.5	4.1	3.8	−3.7	−5.0	−5.7
Romania	6.0	6.0	5.4	4.7	−0.6	4.8	7.0	5.1	−13.9	−14.5	−13.0
Turkey	5.0	5.3	4.0	4.3	−1.3	8.8	7.5	4.5	−5.7	−6.7	−6.3
CIS	**8.5**	**7.0**	**7.0**	**6.5**	**0.0**	**9.7**	**13.1**	**9.5**	**4.5**	**4.8**	**2.4**
Russia	8.1	6.5	6.8	6.3	0.3	9.0	11.4	8.4	5.9	5.8	2.9
Ukraine	7.3	5.4	5.6	4.2	0.2	12.8	21.9	15.7	−4.2	−7.6	−9.7
Middle East	**5.8**	**5.9**	**6.1**	**6.1**	**0.2**	**10.4**	**11.5**	**10.0**	**19.8**	**23.0**	**19.4**
Egypt	7.1	7.3	7.0	7.1	−0.3	11.0	8.8	8.8	1.5	0.8	−0.5
Iran	5.8	6.0	5.8	4.7	−0.2	17.5	20.7	17.4	10.4	11.2	8.4
Africa	**6.2**	**6.5**	**6.3**	**6.4**	**−0.2**	**6.3**	**7.5**	**5.9**	**0.1**	**1.7**	**0.9**
Nigeria	6.4	8.0	9.1	8.3	1.1	5.5	8.6	8.5	0.7	6.5	5.7
South Africa	5.1	4.2	3.8	3.9	−0.4	7.1	8.7	5.9	−7.3	−7.9	−6.5
Asia	**9.1**	**8.3**	**7.5**	**7.8**	**−0.8**	**4.8**	**5.5**	**3.9**	**6.5**	**5.3**	**5.2**
China	11.4	10.0	9.3	9.5	−0.7	4.8	5.9	3.6	11.1	9.8	10.0
India	9.2	8.4	7.9	8.0	−0.5	6.4	5.2	4.0	−1.8	−3.1	−3.4
Indonesia	6.3	6.1	6.1	6.3	0.0	6.4	7.1	5.9	2.5	1.8	1.2
Korea	5.0	4.6	4.2	4.4	−0.4	2.5	3.4	2.9	0.6	−1.0	−0.9
Latin America[1]	**5.6**	**4.3**	**4.4**	**3.6**	**0.1**	**5.4**	**6.6**	**6.1**	**0.5**	**−0.3**	**−0.9**
Argentina	8.7	5.5	7.0	4.5	1.5	8.8	9.2	9.1	1.1	0.4	−0.5
Brazil	5.4	4.0	4.8	3.7	0.8	3.6	4.8	4.3	0.3	−0.7	−0.9
Mexico	3.3	3.0	2.0	2.3	−1.0	4.0	3.8	3.2	−0.8	−1.0	−1.6

Source: IMF (World Economic Outlook), October 2007 and April 2008.

[1] *Including the Caribbean.*
[2] *Forecast.*

oil-importing Egypt is remarkable. In *Turkey*, exports continue to be the mainstay of growth, whereas the country's restrictive monetary policy course (geared at combating inflation), renewed fiscal consolidation efforts and weaker credit growth dampen domestic demand.

As compared to October 2007, the IMF revised its forecast for 2008 downward by a total of 0.7 percentage points for the EMEs and the DCs as a group. The size of this downward revision corresponds to that for the euro area, albeit starting from a significantly higher level. From a regional perspective, the IMF's revision almost exclusively mirrors developments in Asia (particularly China) and Europe (particularly Turkey). However, growth forecast revisions for Africa and Latin America vary immensely across countries, with the forecast for Mexico declining particularly given its close ties to the U.S. economy. The IMF quotes high productivity gains in the wake of better integration into the global economy as well as rising commodity prices, which fueled exports, FDI inflows and fixed capital formation, as the reasons why

the financial market turbulence that had originated in the U.S.A. had a relatively small effect on its forecasts for EMEs on the whole.

This evidence, however, must not distract from the fact that recently, the risk of contagion through financial and trade channels has gone up markedly for EMEs and DCs. In particular, EMEs with high *current account deficits* that are financed largely by private foreign borrowing are vulnerable to the implementation of stricter credit standards abroad and to increasing risk aversion. Altogether, EMEs and DCs will again record a substantial current account surplus in 2008 and 2009, whereas Europe is likely to be again the only region with a comparatively large current account deficit which, despite the recent depreciation observed in some countries, will slightly increase in 2008. Nevertheless, depending on the availability of crude oil, current account balances differ widely across countries within the CIS, Africa and Latin America.

In most EMEs and DCs, the IMF sees the main challenge for 2008 in combating the sharp rise in *inflation* caused by higher food and fuel prices as well as increased domestic demand. In China, for example, food prices drove up year-on-year inflation from 1% in July 2006 to 8.7% in February 2008 despite a freeze in administered prices. Not least in view of inflationary pressure, the Chinese policy of a gradual appreciation of the Chinese renminbiyuan against the U.S. dollar allowed a noticeable appreciation at the end of 2007. Combating inflation poses a major challenge also to the oil-exporting countries whose currencies are tied to the U.S. dollar and which feature strongly increasing money supply growth in connection with high current account surpluses. In Turkey, current political uncertainties and their implications for the stability of the national currency represent, along with high food and energy prices, an additional obstacle to meeting the 2008 inflation target.

FDI Inflows to Private Sector Remain High, while Public Sector Net Capital Outflows Continue

In recent years, *net capital inflows to the private sector* have been at historically high levels in many EMEs and DCs. In 2007, these capital inflows rose by more than one and a half times, although inflows weakened from August 2007 onward. Traditionally FDI dominates net inflows. An additional factor in 2007 was a sharp rise in net inflows from loans borrowed abroad. The IMF, however, expects net inflows to almost halve in 2008. This expected reduction may be connected to a significant decrease in net inflows from cross-border loans and an expected turn, in volatile portfolio investment, from net inflows to net outflows, as Asia's private sector is expected to increasingly invest in foreign securities – a development which is anticipated to slow down significantly in 2009.

In Africa, Asia, the Middle East and Latin *America, FDI* remains the dominant type of net capital inflows to the private sector in EMEs and DCs in 2008. While having been the most important source of external finance in the CIS and in Europe in 2007, net *credit* inflows will probably play a clearly minor role in 2008. As a consequence, FDI is likely to become the most important type of financing in CIS and rank equally in importance in Europe. Whereas in Asia, net inflows from bank loans are expected to remain the second important source of finance, the Middle East and Latin America will once again experience continued net

Table 3

Net Capital Inflows to Emerging Market Economies and Developing Countries[1]

	2004	2005	2006	2007	2008[2]	2009[2]
	USD billion					
Net capital inflows to the private sector	241.9	251.8	231.9	605.0	330.7	441.5
By instrument						
Direct investment	188.7	259.8	250.1	309.9	306.9	322.4
Portfolio investment	16.4	–19.4	–103.8	48.5	–72.2	31.0
Other flows (especially loans)	38.5	13.3	87.5	248.8	98.0	90.0
By region (country)						
Europe (CESEE)	74.3	118.1	120.4	170.5	162.5	158.2
CIS	6.7	32.5	57.9	115.1	59.1	89.1
Middle East	–17.0	–56.7	–43.4	–21.0	–62.1	–63.0
Africa	16.0	30.5	39.6	47.1	57.5	64.2
Asia	146.6	90.8	47.9	193.5	40.7	116.2
Latin America and the Caribbean	15.2	36.7	9.5	99.7	73.0	76.8
Net capital inflows to the public sector[3]	–70.7	–109.9	–160.0	–149.0	–162.3	–149.8
Memorandum item						
Current account balance	*297.2*	*517.3*	*698.0*	*738.1*	*814.7*	*750.0*
Reserve assets[4]	*–509.3*	*–595.1*	*–752.8*	*–1236.2*	*–1004.1*	*–1071.4*
of which: held by China	*206.3*	*207.0*	*247.0*	*461.9*	*380.0*	*500.0*

Source: IMF (World Economic Outlook), April 2008.

[1] *This table shows aggregated balance of payments data sets of 131 nonindustrialized countries, including 44 major EMEs. Europe = Central, Eastern and Southeastern Europe excluding European CIS countries and including Turkey. Asia = including Hong Kong, Korea, Singapore and Taiwan.*

[2] *Forecast.*

[3] *A minus sign indicates net outflows of capital from developing countries to industrialized countries.*

[4] *A minus sign indicates an increase.*

outflows on bank loans. As in 2007, net inflows to *portfolio investment* are anticipated to be significant only in Latin America.

The only region with a persistently high *current account deficit*, namely Europe (CESEE), has been attracting the highest *net capital inflows to the private sector* since the mid-1990s and is likely to remain in the lead (after briefly coming in second to Asia in 2007). The Middle East is the only region which, as in previous years, will experience *net capital outflows from the private sector* (investment of *current account surpluses* resulting from petrodollars). All other regions have recorded a combination of *current account surpluses* and *net capital inflows to the private sector* since 2004 – a development that appears set to continue in 2008 and 2009, except in Latin America, where the slight current account surplus is expected to turn slightly negative.

In all the regions under review (except in Latin America), the *public sectors* (excluding central banks) recorded *net capital outflows* in 2007 (both repayment of foreign debt and investment abroad); the same should hold for 2008 and 2009, this time with the exception of Africa and Latin America. Again, overall developments will primarily be attributable to developments in the Middle East. Moreover, all regions under observation are expected to continue to *increase official reserves* in 2008, albeit Asia and Latin America will do so to a lesser extent than in 2007. In absolute figures, the increase will be strongest in Asia, however, given that Asia records the largest current account surplus in absolute terms.

Table 4

Claims of BIS Reporting Banks on Central, Eastern and Southeastern Europe[1]

	AT	DE	IT	FR	NL	SE	BE	UK	Europe[2]	US	Japan
	% of GDP of the recipient country										
CESEE	8.8	6.8	6.5	4.6	2.6	2.9	3.7	1.7	44.5	2.2	0.7
CESEE EU Member States (excluding the Baltic countries)											
Bulgaria	12.3	4.0	17.6	5.2	1.4	0.0	0.5	0.3	70.6	1.0	0.2
Czech Republic	28.7	5.3	9.6	17.5	3.4	0.0	24.6	..	93.7	3.1	0.6
Hungary	24.3	23.1	18.4	4.9	3.6	0.2	11.8	..	93.7	2.2	1.6
Poland	3.5	9.8	12.5	3.3	5.7	1.2	4.5	0.4	51.3	2.8	1.2
Romania	27.6	14.1	6.8	11.6	4.7	0.1	0.6	0.1	80.0	1.2	0.1
Slovakia	40.8	5.4	26.9	2.2	6.1	0.1	9.9	..	93.7	2.5	0.1
Slovenia	28.0	14.2	13.8	5.7	1.6	0.0	6.2	0.5	73.7	1.1	0.9
Other CESEE countries											
Croatia	64.8	8.8	59.7	15.9	0.6	0.0	0.8	0.8	153.6	0.5	1.0
Ukraine	8.2	2.9	1.5	6.4	2.1	1.2	0.4	0.5	28.7	0.9	0.6
Russia	1.6	4.0	1.6	2.4	1.6	0.4	0.5	..	15.1	1.5	0.8
Turkey	0.4	3.0	..	2.4	1.3	0.1	2.3	..	18.8	2.9	0.5

Source: BIS, Eurostat, Thomson Financial, national sources and OeNB calculations.

Note: The claims shown here correspond to the „Consolidated foreign claims of reporting banks" published by the BIS (BIS Quarterly Review March 2008, table 9B). For every bank, these include the claims (in all currencies) of both parent and subsidiary companies on borrowers outside the group in the relevant countries. In this consolidated overview, claims of Austrian banks do not include claims of the Bank Austria (BA) group.

[1] *As of end-September 2007.*

[2] *In addition to the countries of origin listed individually, „Europe" comprises Denmark, Greece, Ireland, Portugal, Finland, Spain, Switzerland, Norway and Slovenia.*

Continued High Level of Austrian Bank Claims on CESEE

At end-September 2007, Austrian banks'[2] claims accounted for nearly 9% of nominal GDP in the recipient countries in CESEE, putting Austrian banks ahead of all other countries' banks in terms of claims on the region (see table 4). Austrian banks account for nearly one-fifth of total claims on the region of all BIS reporting banks.

By international comparison, Austrian banks had the highest claims on Slovenia, the Czech Republic, Slovakia, Hungary, Romania, Croatia and Ukraine and the second-highest claims on Bulgaria (after Italian banks). Together with Italian banks, Austrian banks had the third-highest claims on Russia after German and French banks. In Slovenia (as a member of the euro area), the Czech Republic, Slovakia, Romania, Croatia and Ukraine, in turn, the fact that more than 25% of the claims of all BIS reporting banks on this region are held by Austrian banks confirms the prominent role of Austrian banks in the region.

Eurobonds under Pressure from Protracted Global Nervousness in Financial Markets

Since its beginnings in the summer of 2007, the global financial turmoil has been affecting developments on the international Eurobond market. Thus, the trend of rising average *yield differentials* of emerging market issuers' government bonds denominated in euro and U.S. dollar against U.S. and euro area government bonds (as measured by JPMorgan's (Euro) EMBI (Emerg-

[2] *The BIS consolidated banking statistics does not subsume the BA group among Austrian banks.*

ing Markets Bond Index) Global) has continued since June 2007. In the reporting period from end-September 2007 to end-March 2008, spreads widened by a total of 111 basis points (U.S. dollar bonds) and 57 basis points (euro bonds). The different development of spreads of these two indices is also attributable to differences in the development of the benchmark bonds underlying each index. The general upward trend in yield spreads was interrupted by two downward movements in December 2007 and February 2008. This development seems to have eased somewhat since mid-March 2008, after the average yield differential of U.S. dollar-denominated bonds had reached its highest level since June 2005 and that of euro-denominated bonds had reached its highest level since July 2004. Yield spreads had thus widened by 174 (U.S. dollar) and 91 (euro) basis points to their highest levels from their all-time lows recorded at the end of May/beginning of June 2007. This up-and-down movement with an overall upward tendency was in line with the movements observed in other segments of the international financial market and reflects that investors are gradually becoming informed of the dimensions of the financial problems and losses involved.

In spite of widened yield differentials, total returns were positive for both indices from end-September until end-March: The euro-denominated Euro EMBI Global recorded total returns of more than 1.6% (not annualized), and the corresponding rate for the EMBI Global came to 3.3%.

As in the last reporting period, the current period showed a discrepancy between the rise in yield spreads and the *development of economic fundamentals* (as measured by average ratings) at the level of overall indices. Although the number of rating upgrades by the three largest rating agencies for the countries contained in both indices was noticeably lower compared with the previous year, it was clearly above the number of rating downgrades. Despite the posi-

Table 5

Eurobonds: Spreads to Reference Bonds and Returns by Region

	EMBI Global (USD)						Euro EMBI Global (EUR)					
	Weight in overall index in %	Yield spreads in basis points		Total return in %	Rating	Duration	Weight in overall index in %	Yield spreads in basis points		Total return in %	Rating	Duration
	March 31, 2008	March 31, 2008	Change since Sep. 30, 2007	Since Sep. 30, 2007	March 31, 2008	March 31, 2008	March 31, 2008	March 31, 2008	Change since Sep. 30, 2007	Since Sep. 30, 2007	March 31, 2008	March 31, 2008
Overall index	100.0	325	70	0.6	BB+	7.00	100.0	129	38	1.0	BBB+	5.18
Africa	2.7	428	84	1.3	BB+	4.71	4.6	254	126	–2.5	BBB+	4.72
Asia	17.4	272	58	1.8	BB+	6.58	4.8	115	23	1.7	BBB	3.55
Europe	26.9	272	77	0.6	BBB–	6.40	72.8	103	30	1.3	BBB+	5.44
Latin America	49.5	347	72	0.1	BB+	7.75	17.8	224	57	0.4	BBB–	4.60
Middle East	3.5	577	56	2.7	B–	4.79	..	..	..	..	..	..

Source: Bloomberg, JPMorgan, OeNB calculations.

Note: The EMBI Global and Euro EMBI Global indices differ in composition (in terms of currencies, countries covered, instruments, maturities, etc.). Differences in the level and development of yield spreads and returns as well as in other index features can be attributed in part to this different composition and in part to different investor structures. The rating is calculated as the average of Moody's, Standard & Poor's and Fitch's ratings for long-term government foreign currency sovereign debt and is expressed in the rating categories of Standard & Poor's.

tive development of economic fundamentals, demand for Eurobonds issued by emerging market sovereign debtors ebbed after the onset of the financial crisis. Assuming that ratings are appropriate, the divergent development of fundamentals and yield differentials may either be interpreted as a contagion-related temporary negative overshooting or as a sustained correction of investors' previously excessive risk appetite. The further development of the global financial market turbulence and its real economic implications join country-specific developments (particularly regarding external balances and political stability) as main risk factors for the Eurobond market.

Just like Eurobonds issued by European EMEs typically lag the overall index in times of decreasing yield spreads (meaning that owing to their much lower initial level, the decline in their yield spreads and their total return lag behind those of the overall index), the negative developments observed during the reporting period likewise only had a limited impact on these Eurobonds. Among European Eurobonds, those issued by Serbia, Ukraine, Bulgaria, Romania and Turkey were hit hardest by the crisis. In these countries, yield spreads increased at a rate that was clearly above the average of all countries contained in the indices, and the three most important rating agencies partly revised downward their rating outlooks for Serbia, Romania and Bulgaria.[3]

Central, Eastern and Southeastern Europe: Robust Growth amid Higher Inflation and Partly Higher Current Account Deficits

Strikingly Divergent Exchange Rate Developments within the Region

In the recent period of financial market turmoil, the exchange rate of the Bulgarian lev remained stable within the framework of the currency board regime in place. By contrast, the exchange rate curves of the not formally pegged currencies reviewed here (Hungarian forint, Slovak koruna, Czech koruna, Croatian kuna, Romanian leu, Russian ruble, Polish zloty) showed a diverse picture against the euro in the review period from end-September 2007 to end-March 2008. While the tightly managed Croatian kuna remained broadly stable against the euro, marked value changes were observed for the other six currencies (see chart 2), with three of them gaining and the other three losing in value. In the period under review, the Czech koruna posted the highest gains against the euro (+8.7%), followed by the Polish zloty (+7%) and the Slovak koruna (+4%). The Hungarian forint depreciated by 3.4%, the Russian ruble by almost 5%, and the Romanian leu by 10.3%.

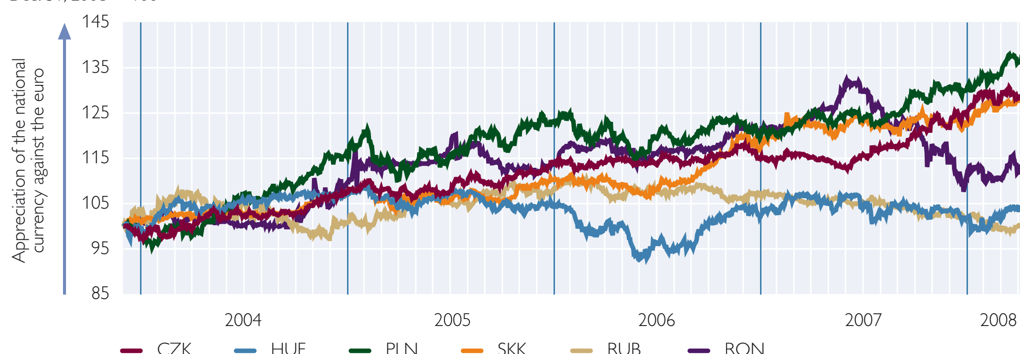
Based on their June 2007 values, the Slovak, Polish and Czech currencies appreciated by 5% (Slovak koruna), 9% (Polish zloty), and even more than 13% (Czech koruna). On the one hand, this development reflects persistently robust economic growth in all three countries combined with a strong export performance and substantial FDI inflows. The Czech koruna was strengthened further by the unwinding of carry trades in which it had served as

[3] *In the reporting period, outlooks were downgraded from stable to negative for Romania by Standard & Poor's and Fitch, for Bulgaria by Fitch and for Serbia by Standard & Poor's.*

Chart 2

National Exchange Rates against the Euro

Dec. 31, 2003 = 100



Source: Thomson Financial.

Note: Index based on euro per unit of national currency.

the funding currency until investors' risk appetite declined in about mid-2007. Expected or actual key interest rate hikes in the Czech Republic and Poland in the light of accelerated inflation also seem to have influenced exchange rate developments.

In the period under review, both the Russian ruble and the Hungarian forint continued their slight but steady decline against the euro that had started in spring 2006 and spring 2007, respectively. The depreciation of the Russian ruble against the euro was primarily attributable to the country's orientation on a de facto currency basket (55% USD and 45% EUR), which means that the Russian currency partially follows the depreciation of the U.S. dollar against the euro. Notwithstanding its recent slight recovery, the Hungarian forint has depreciated by nearly 6% since its maximum value of April 2007. This long-term downward trend can be largely explained by relatively weak medium-term growth perspectives, general political fragility and the associated uncertainty regarding the continued implementation of fiscal consolidation plans. The depreciation of the Romanian leu started a few months later than that of the Hungarian forint, but it was considerably stronger. Having reached its highest value since 2002 at the beginning of July 2007, the leu depreciated by more than 16% so that its value at end-March 2008 was roughly the same as in early 2006. The main reasons for this decline were a deterioration of fundamentals (high and rising current account deficit, rapid unit labor cost growth and loose fiscal policy) as well as the relatively high proportion of short-term capital in the foreign exchange market. Among the currencies reviewed here, the Romanian leu was, in view of these factors, hit hardest by the global financial market turmoil and the resulting increase in investor risk aversion.

In most CESEE countries *economic activity*, remained very robust also in the second half of 2007. In 2007 as a whole, GDP growth was especially pronounced, compared with 2006, in Croatia and Slovakia as well as in Poland, and markedly lower only in Romania and Hungary. Annual growth in the region amounted to between slightly above 5.5% in Bulgaria and Romania and nearly 10.5% in Slovakia, where one-off factors were instrumen-

Table 6

Fundamental Factors Influencing Exchange Rate Developments

	GDP growth (in %)		Contribution of net exports to GDP growth (in percentage points)		Balance of trade and services (in % of GDP)		Balance on income (in % of GDP)		Demand for external financing (in % of GPD)[1]		Demand for external financing plus net FDI inflows (in % of GDP)	
	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007
Bulgaria	6.3	6.2	−8.3	−5.8	−18.4	−21.6	−2.1	−1.1	−17.1	−20.3	6.0	0.1
Czech Republic	6.4	6.5	0.4	0.7	3.2	4.7	−5.7	−7.2	−2.9	−2.4	0.4	1.8
Hungary	3.9	1.3	3.7	2.3	0.4	2.5	−6.9	−7.9	−5.3	−4.0	−2.5	−3.0
Poland	6.2	6.5	−1.1	−0.9	−1.8	−2.7	−2.8	−3.0	−2.6	−2.6	0.3	1.2
Romania	7.9	6.1	−9.6	−14.9	−12.1	−14.3	−3.3	−3.6	−10.5	−13.2	−1.6	−7.4
Slovakia	8.5	10.4	2.3	5.4	−3.2	−0.5	−3.7	−4.3	−7.1	−4.8	−0.3	−1.2
Croatia	4.8	5.6	−1.1	−0.8	−7.7	−8.4	−7.7	−2.9	−8.1	−8.4	−0.6	0.2
Russia	7.3	8.1	−3.9	−7.0	12.7	8.7	−3.0	−2.3	9.6	5.3	10.6	5.8

Source: Eurostat, national central banks, OeNB.

[1] *Demand for external financing = sum of current account balance and capital account balance.*

tal in accelerating growth in the second half of 2007. Hungary continued to stand out with a further reduction of growth to only 1.3% due to government austerity measures.

While the growth contribution of *domestic demand* increased in Croatia, Poland and especially in Romania, it declined in the other countries and turned negative in Hungary. Among the domestic demand components, investment growth (considerably) outpaced the growth of private consumption in 2007 in all countries but Croatia. In Hungary, private consumption growth was negative. At the same time, private consumption growth was stronger than GDP growth only in Croatia and especially in Romania. Disregarding developments in Hungary, domestic demand in the region was mainly driven by strong real wage and loan growth.

With the exception of Slovakia, Hungary and the Czech Republic, the *contribution of net exports to growth* remained negative, and the *goods and services balance* deteriorated in 2007. Especially Bulgaria and Romania, which recorded the highest negative growth contribution of net exports together with Russia, saw the goods and services deficit rise further from already high levels. The high and rising external imbalances may, however, be partially explained by the economic catching-up process and strong investment demand. Still, in Romania, import growth appears to have been fueled further by the persistently strong growth of private consumption (11%), which caused the goods and services deficit to rise while GDP growth declined.

The *combined current account and capital account balance* remained negative (i.e. indicating a need for external finance) in all countries of the region except Russia. Yet the level and structure of the deficits varied highly across the region. In the four Central European countries the deficit in the combined current and capital account in 2007 basically reflected a negative income balance, which can in turn be explained by outflows of dividends and profits to foreign investors. In all four countries, demand for external financing was below 5% of GDP and lower than in 2006 (even though only slightly lower in Poland). In contrast, demand for external financing increased over

2006 in Croatia and especially Bulgaria and Romania, fueled by the development of the trade and services balance. In most CESEE countries, net FDI inflows (including intracompany loans) remained high enough to cover the demand for external financing, the only exceptions being Slovakia, Hungary and especially Romania, where the remaining gap widened markedly compared with 2006.

The Hungarian forint and the Romanian leu continued to exhibit the highest *short-term interest rate differentials relative to the euro area.* While those differentials were narrowing moderately in Hungary until December 2007 and sharply in Romania until September 2007, the differentials have since been widening again by over 90 basis points (Hungary) or as much as 380 basis points (Romania) in line with their NCBs' monetary policies. These developments have made foreign currency loans more attractive in Hungary and Romania, when leaving aside the higher exchange rate risk. In Poland the short-term interest rate differential to the euro area has risen markedly following several key rate increases, while the Czech Republic's persistently negative differential relative to the euro area gradually declined following several key rate increases. At the same time, Slovakia's differential remained relatively stable; it has been slightly negative since mid-August 2007, mainly because of the increase of interbank rates in the euro area.

Croatia was the only CESEE country to execute larger-scale *foreign exchange interventions* in order to influence exchange rate dynamics in the report period. Responding to the slight appreciation of the kuna since the beginning of April 2007, Hrvatska narodna banka intervened four times in the course of 2007, and most recently in February 2008, to counteract appreciation pressures on the kuna that had risen following liquidity-absorbing measures combating inflation. Likewise, measures taken by the Czech and Polish governments and central banks at the end of March and the beginning of April, respectively, can be interpreted as influencing the foreign currency supply on the exchange market: in Poland, an EIB loan taken up by the state was transferred to a foreign currency account of the central bank, and in the Czech Republic an agreement was reached stating that future privatization profits are to be frozen on a dedicated central bank account.

Banks' net external asset position deteriorated in 2007 in Bulgaria, Poland, Slovakia, Hungary, Romania and Russia. The deterioration was especially pronounced in Bulgaria and also strong in Romania. While Bulgaria (and Poland) saw a previously positive net asset position turn negative, the other countries experienced a further increase in their already negative net asset positions. These developments are likely to have contributed to the firming of the zloty and the Slovak koruna, whereas they may have slowed down the depreciation of the leu.

In view of the global financial market turmoil the most important *risk factors* for the CESEE countries lie in a slowdown of GDP growth in the euro area, a deterioration of the investment climate and a worsening of external financing conditions. That would affect most of all countries which have elevated current account deficits and where net FDI inflows are insufficient to cover external financing needs.[4]

[4] *For further information see also the study of Gardó et al. in this issue.*

Yield Spreads of Local Currency-Denominated Government Bonds Widen Marginally

In the Central and Southeastern European countries analyzed here (Bulgaria, Poland, Romania, Slovakia, the Czech Republic and Hungary) the yield spreads of ten-year local currency-denominated government bonds widened against euro benchmark bonds during the review period (see table 7). Hungary recorded the highest spread increase by far with about 220 basis points, whereas the yield spreads of Bulgarian, Czech and Polish government bonds widened by more or less equal amounts (about 60 to 80 basis points) from divergent levels. The yield spreads of Slovakian bonds widened by just close to 20 basis points. As a result, Slovakia recorded the smallest spread among the six countries in March 2008, followed by the Czech Republic and Bulgaria. At the same time, the risk premiums of Bulgaria, the Czech Republic, Poland and Hungary reached the highest levels since the beginning of 2005.

Across CESEE, the development of the *inflation differential against the euro area* had an adverse impact on local currency-denominated bond yields – the only exception being Hungary, where the inflation differential slightly declined, albeit remaining at a relatively high level. Slovakia was the only CESEE country to match the euro area's annual inflation rate in March 2008. As before, inflation in CESEE continued to be primarily driven by developments in international commodity prices (energy and food). Some countries moreover experienced indirect tax hikes and rising unit labor costs, while private consumption generated substantial inflationary pressures only in Romania. Yield spreads increased in line with inflation differentials, but more moderately, in all countries except for Hungary. This gap shows that the latest uptick in inflation in these countries is considered rather a temporary phenomenon and that long-term inflation expectations have not been revised upward substantially. In Hungary, yield spreads moved in the opposite direction of the inflation differential, as the

Table 7

Fundamental Factors Influencing Local Currency-Denominated Government Bond Yield Spreads

	Nominal yield of local currency-denominated ten-year government bonds p.a. (in %)			Nominal 3-month interbank money market rate in local currency p.a. (in %)			HICP year on year (in %)			General government budget balance (in % of GDP)[1]		Balance of trade and services (in % of GDP)		Demand for external financing plus net FDI inflows (in % of GDP)[1]	
	Mar. 07	Sep. 07	Mar. 08	Mar. 07	Sep. 07	Mar. 08	Mar. 07	Sep. 07	Mar. 08	2006	2007	2006	2007	2006	2007
Bulgaria	4.2	4.4	4.9	3.8	5.2	6.7	4.4	11.0	13.2	3.0	3.4	–18.4	–21.6	6.0	0.1
Czech Republic	3.8	4.5	4.7	2.6	3.5	4.1	2.1	2.8	7.1	–2.7	–1.6	3.2	4.7	0.4	1.8
Hungary	6.8	6.7	8.4	8.0	7.7	8.1	9.0	6.4	6.7	–9.2	–5.5	0.4	2.5	–2.5	–3.0
Poland	5.2	5.7	6.0	4.2	5.1	6.0	2.4	2.7	4.4	–3.8	–2.0	–1.8	–2.7	0.3	1.2
Romania	7.5	6.9	6.9	7.5	6.8	10.8	3.7	6.1	8.7	–2.2	–2.5	–12.1	–14.3	–1.6	–7.4
Slovakia	4.2	4.6	4.3	4.5	4.3	4.3	2.1	1.7	3.6	–3.6	–2.2	–3.2	–0.5	–0.3	–1.2
Euro area[2]	4.0	4.2	3.8	3.9	4.7	4.6	1.9	2.1	3.6	–1.3	–0.6	–0.1	0.0	n.a.	n.a.

Source: Eurostat, national central banks, OeNB. Monthly values are monthly average values.

[1] *Demand for external financing = sum of current account balance and capital account balance.*

[2] *Euro area: Current account balance (corrected for statistical discrepancies within the euro area) instead of balance of trade and services.*

impact of inflation on yields was masked by other influencing factors.

Changes in the *differentials between short-term money market rates in the countries analyzed here and the euro area* pointed in the same direction as changes in long-term yield premiums in all countries during the review period. At the same time, the change of the short-term interest rate differential was considerably more pronounced than the change in yield spreads in Bulgaria and Romania, and markedly weaker in Hungary.

All countries except for Romania reported lower *budget deficits* in 2007 than in 2006; and Bulgaria was able to increase its surplus. These developments may have dampened the widening of spreads. The reduction of the deficits was favored by strong economic growth and rising inflation. However, the Central European countries and most markedly Hungary also managed to correct structural budget balances. Hungary, while successful in cutting its deficit substantially, still retains comparatively high budgetary imbalances. At the same time, uncertainties regarding the continuation of austerity measures had a negative effect on the government bond market.

The development of *the net external balance* and related exchange rate expectations also may have influenced local currency-denominated government bond yield spreads during the review period in some countries, especially in Romania and Bulgaria.

Finally, the globally declining risk propensity continued to have a substantial impact on the local currency-denominated bond yields of the six countries reviewed here. Risk premiums on local currency-denominated government bonds will be influenced substantially by developments in international financial markets also in the coming months. In view of higher inflation rates, anchoring inflationary expectations on a low level, especially through an active communication policy, may help prevent a further increase of yield premiums. What will also remain important in this respect is the adherence to existing plans of fiscal consolidation as well as the implementation of prudent and differentiated wage policy measures in the public sector.