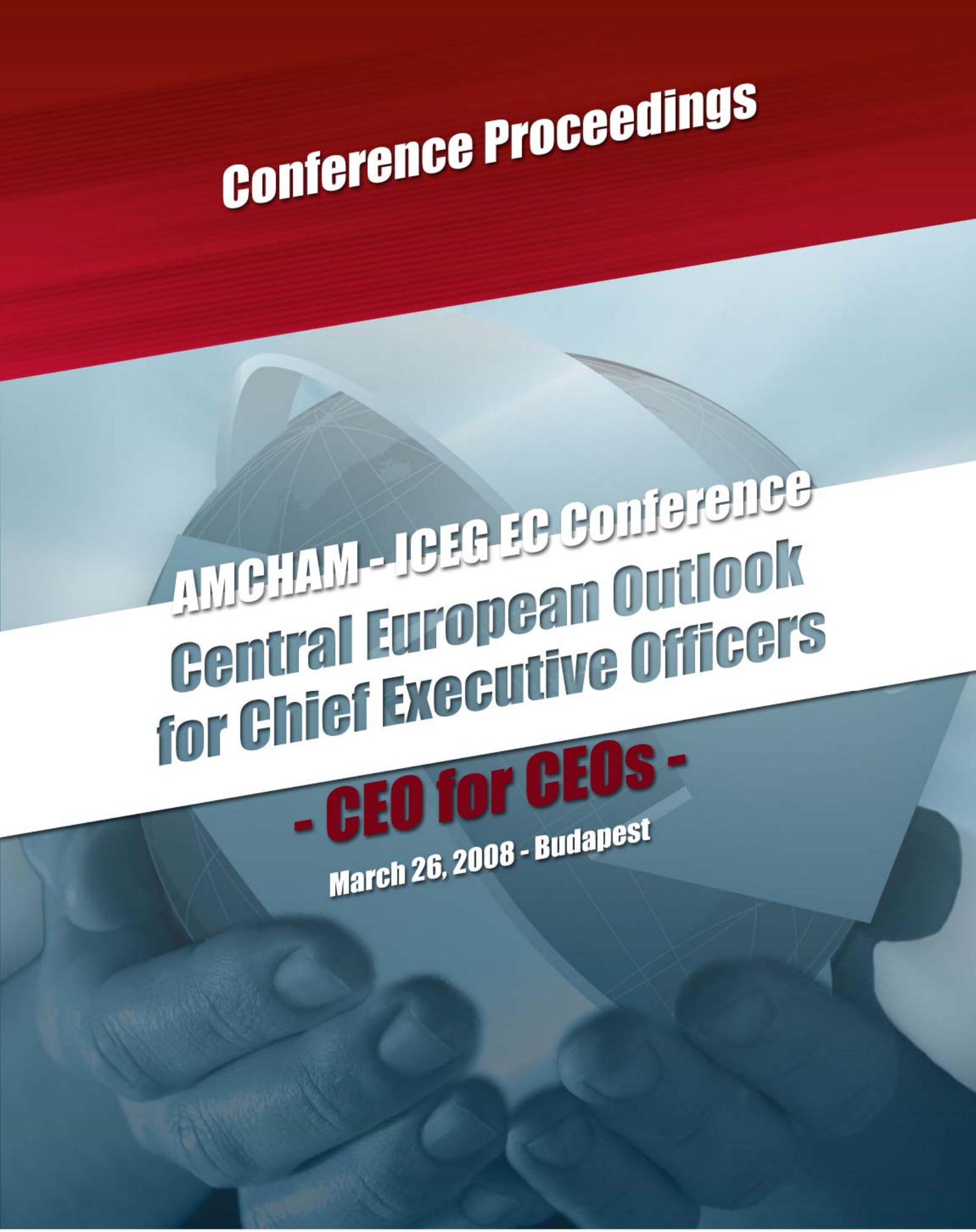
Conference Proceedings

# AMCHAM - ICEG EC Conference
# Central European Outlook for Chief Executive Officers

## - CEO for CEOs -

March 26, 2008 - Budapest



ICEG EC

AMERICAN CHAMBER OF COMMERCE IN HUNGARY

## Foreword

AMCHAM (the American Chamber of Commerce in Hungary) and ICEG European Center has an established partnership in jointly organising conferences, seminars and workshops. Earlier conferences (like the one after the elections in 2006 focusing on the crucial economic policy challenges) and workshops (especially the sectoral workshops) were all appreciated by both the business community and media representatives.

While the above mentioned events mostly addressed domestic issues, in 2008 AMCHAM and ICEG EC decided to organise a truly international conference on the economic outlook of the Central European economies. The main aim was to give businessmen with a vested interest in the region a deeper insight into economic developments and the associated risks in the most dynamically growing region of the European Union.

The first session of the conference had economic growth in its focus. *Jürgen Kröger* (from the Economic and Financial Directorate of the European Commission) gave an excellent overview of the most important transition-related issues that most economies from the region had to and some still face. *Carolin Nerlich* (from the European Central Bank) then went on analysing the determinants and prospects of long-term growth also touching upon the issue whether there are important policy measures that can foster catch-up with the developed economies of the EU. *Peter Backé* (from the Oesterreichische Nationalbank) presented his views on the short-term outlook of the Central European countries taking stock of the most important factors that influence current growth performances in the region. *Péter Bilek* and *Pál Gáspár* (from ICEG European Center) made a clear distinction between short-term and long-term growth issues in their presentation and made recommendations for common and country-specific policy measures to promote sustainable growth. Finally, *György Rétfalvi* (from the Hungarian Investment and Trade Development Agency) gave a broad overview of investment opportunities and policies in the economies of the region.

The second section was devoted to discuss the financial sector related issues which attracted special attention in the light of the unfolding global financial turbulence. *Debora Revoltella* (from the UniCredit Group) assessed the exposure of the financial sector in Central and Eastern Europe to the increased global risk levels in her presentation and came to the conclusion, that most countries could cope with the challenge, but there are some really vulnerable economies, mostly among CIS members. *Charles Robertson* (from ING Group) analysed the relationship between bank lending and economic growth and argued, that there is still room for credit boom in Central Europe even in an environment of increased global risks. *László Urbán* (from OTP Bank) warned in his presentation that markets appear to overestimate the risk associated with Central Europe, especially if fiscal or external balance indicators are weak. Thus, Central European economies can be indirectly influenced by the global financial turbulence even if the balance sheets of banks are relatively sound in the region. Finally, *László M. Balássy* (from Citibank) presented a more technical aspect of the global

financial turbulence stressing the possible negative effects of high leverages and expected write-downs that will also be felt across the bank sector of Central Europe.

The third section of the conference began with *Christoph Rosenberg*'s (the regional representative of the IMF) presentation, who drew the attention to the importance of sound fiscal policies and argumented in favour of fiscal rules that can enhance the credibility of fiscal policy. In his presentation *Aleksander Aristovnik* (from the University of Ljubljana) examined the size of the public sector in the region's economies and came to the conclusion that it indeed matters from the viewpoint of macroeconomic stability, but the structure of fiscal incomes and revenues play an even greater role in deciding whether (im)balances are sustainable on a long-run or not. *László Ábrahám* (from National Instruments) built his presentation around the difficulties that direct investors face in the region's labour markets, most notably in hiring workers in the needed amount and quality. Finally, *Miroslav Beblavy* (from the Slovakian Governance Institute) had a strong argument, that unless adequate policy steps are taken, there is a danger that labour will be in shortage in the economies of the region seriously undermining further growth opportunities.

Of the thirteen presentations, four is elaborated on by their respective authors in this „Conference Proceedings". The first article is that of Jürgen Kröger explaining the catch-up process of the Central European economies in more detail. The second article is from Péter Bilek and Pál Gáspár, who analyse the short-term and long-term growth patterns in the region and also the policy measures that are needed to maintain the current inertia. The third article is written by Debora Revoltella (co-authored by Matteo Ferrazzi), who assessed the exposure of the financial sector of Central Europe to the global financial turbulence. In the fourth article Aleksander Aristovnik analyses the sustainability of public sector imbalances of the region's economies in a model framework.

For further information on past and future AMCHAM – ICEG EC joint conferences you are advised to visit the website of ICEG European Center at **http://www.icegec.hu**

# Central European Outlook for Chief Executive Officers – CEO for CEOs

**Main sponsor:**

**Venue sponsor:**

**Media partners:**

## Scheduled Program:

| | |
|---|---|
| **08:30 – 09:00** | **Registration and welcome coffee** |
| | |
| **09:00 – 10:50** | **Panel 1: Growth Outlook in Central Europe** |
| | Panelists: |
| | Jürgen Kröger, Director, Economies of the Member States I, DG ECFIN |
| | Carolin Nerlich, Senior economist, EU Countries Division, European Central Bank |
| | Peter Backé, Head of the Central and East European Analysis Unit, Österreichische Nationalbank |
| | György Rétfalvi, CEO, ITD Hungary |
| | Péter Bilek, Research fellow, ICEG European Center |
| | |
| **10:50 – 11:10** | **Coffee break** |
| | |
| **11:10 – 13:00** | **Panel 2: Financial Sector Issues in Central Europe** |
| | Panelists: |
| | Debora Revoltella, Chief economist for Central and East Europe, UniCredit Group |
| | Charles Robertson, Head of research and chief economist – Emerging Europe, Middle East and Africa, ING (London) |
| | László Urbán, Deputy CEO, OTP Bank |
| | László M. Balássy, General manager, Citi Markets & Banking Zrt. |
| | |
| **13:00 – 14:00** | **Buffet lunch** |
| | |
| **14:00 – 15:50** | **Panel 3: Fiscal and Labour Issues in Central Europe** |
| | Panelists: |
| | Christoph Rosenberg, Senior regional representative for Central Europe and the Baltics, IMF |
| | Aleksander Aristovnik, Department of Public Sector Economics, University of Ljubljana |
| | László Ábrahám, Managing director, National Instruments |
| | Miroslav Beblavy, Executive director, Slovakian Governance Institute |

The conference will be held in English.

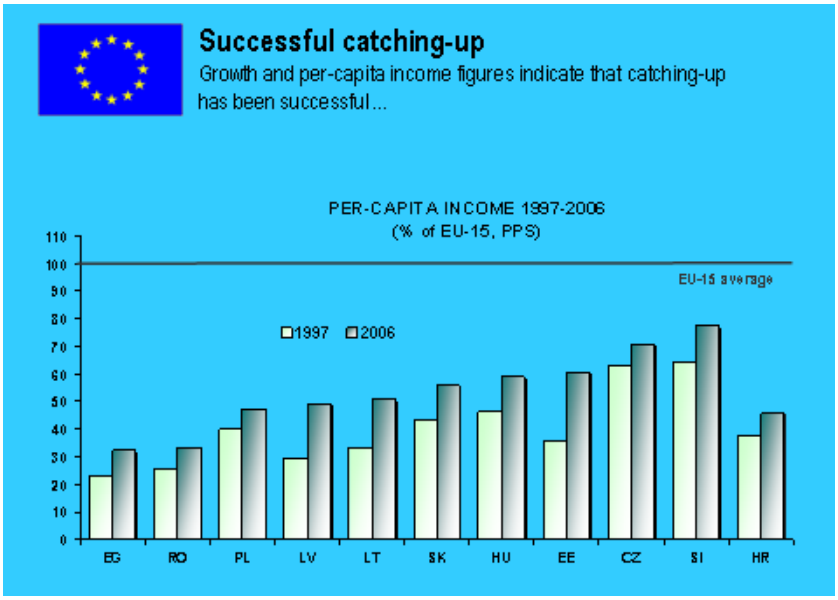
# The Catching-up Process in the New Member States – Where Do We Stand?

- Jürgen Kröger (European Commission) –

## Catching-up dynamics in the new member states

All of the 10 Eastern EU countries, including Bulgaria and Romania, are in a catching-up process. Per capita income has increased relative to the EU average although the level is still below the EU average and in some countries markedly so. This is a welcome process. It contributes to a greater cohesion among EU Member States. Catching-up prospects reduce tensions which may otherwise arise in terms of migration pressures, cross-country wage pressures, losses of low wage jobs in the advanced economies and call for transfers. However, the question arises as to the sustainability of the catching-up process and its quality.

**Figure 1. Catching-up with the 'old' member states between 1997 and 2006**




The catching-up process takes place under free capital movements. Most other positive examples of catching-up have taken place under external and also internal capital restrictions (Germany, Japan, Korea and China today). In a stylised scenario, the catching-up process should proceed as follows:

**Phase 1: Upswing**

- Initially the real expected rate of upturn has to be high
- In order to avoid overheating monetary policy has to be used, not fiscal policy
- Tight money supply in the upswing is necessary to contain inflation, establish demand-supply equilibrium and help achieving intertemporal equilibrium
- Appreciation of the domestic currency reduces import costs
- Current account deficits (mostly covered by FDI) fill the supply-demand gap

**Phase 2: Consolidation**

- Increases in the capital stock due to strong investment activity: potential output rises
- Domestic supply approaches domestic demand
- The marginal rate of return diminishes to the level of partner countries
- Monetary policy is gradually easing
- Net exports are rising as the exchange rate depreciates
- Current account balances are moving towards sustainable levels

However, many of the countries have given up their monetary policy as an instrument of steering this process, either through a currency board system or some kind of targeting vis-à-vis the euro (ERM II). Admittedly, for small open economies, conducting an independent monetary policy is not an easy task. However, what happens if a country fixes its exchange rate to the euro? If the exchange rate commitment is credible on financial markets, the low interest rate of the euro will also prevail in the respective country.

For some observers – including well-known academic colleagues – this constitutes a welcome feature. Financing investment projects is cheap, which supports the catching-up process. However, cheap capital and inappropriately low risk premia may have detrimental medium-term effects during the catching-up process.

In comparison with the expected high rate of return for physical investment, monetary conditions will become expansionary. Too many investment projects will become profitable and an optimal allocation of capital is unlikely. Moreover, given the low interest rates compared to high income expectation housing investment will also pick up as will the purchase of consumer durables by private households. Given free capital markets, credit will be available both from domestic and external sources.

Consequently, the economy will become overheated: inflation will pick up and real interest rates will shrink further. Asset market developments may exacerbate the private sector overheating. Over time, inflation will badly influence competitiveness, investment will be frustrated and a downward adjustment will become necessary to regain price competitiveness. The cycle in the real exchange rate will now take place via inflation differential. This process is eventually very persistent and the real exchange rate may overshoot its equilibrium level.

The question arises why the trends with regard to diverging price competitiveness are so persistent. In our 2006 review of the EU we found that part of the explanation, in addition to an unsatisfactory flexibility of the markets, is the interaction between the impact of real interest rates and developments in competitiveness in a credibly fixed exchange rate regime.

Such developments are observed not only in catching-up countries with currency board regimes but also in EMU. A country which is ahead of the cycle, say Spain, experiences higher inflation in the upswing as it did for many years. In the EMU consequently, real interest rates are lower than in partner countries despite the higher inflation. This does not only fuel domestic demand but also has an expansionary impact on asset markets, including residential construction. This may even lead to sectoral prices rising further ahead creating bubble-type dynamics. Such a cycle may take many years.

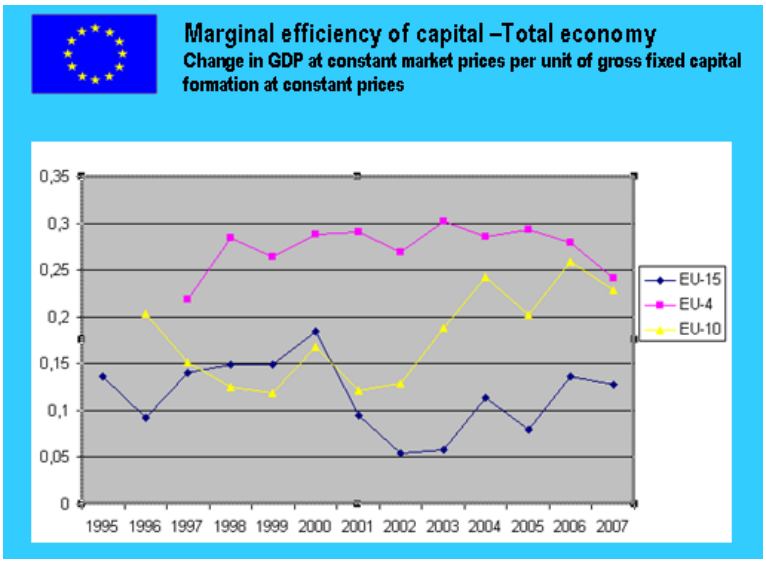
Overheating would certainly imply a demand-supply gap. But the consequent current account deficit is easily financed in the EMU given the absence of exchange rate risk premia and growing financial integration in the euro area.

Over time, however, there are stabilizing mechanisms. While the real interest impact may be permanent, the appreciation of the real exchange rate is a cumulative process dominating only in the longer run. Also, the rising stock of external liabilities will work as a brake, because a GDP/GNP gap may evolve limiting the growth of domestically available income.

Should the exchange rate overshoot in the medium term, (and there are clear indications that it did so both in Germany which may have achieved too good price competitiveness in the euro area and the Southern countries where the opposite may be true) a reverse adjustment has to set in. High inflation countries have to undershoot the euro area average while good inflation performers cannot be the best for ever.

Analysing the situation in the new Member States is not an easy task, since countries differ considerably as regards their sectoral adjustment, policy approach and size. Nevertheless, the stylized facts outlined in the introduction seem to characterise the development to date.

**Figure 2. Marginal efficiency of capital between 1995 and 2007**



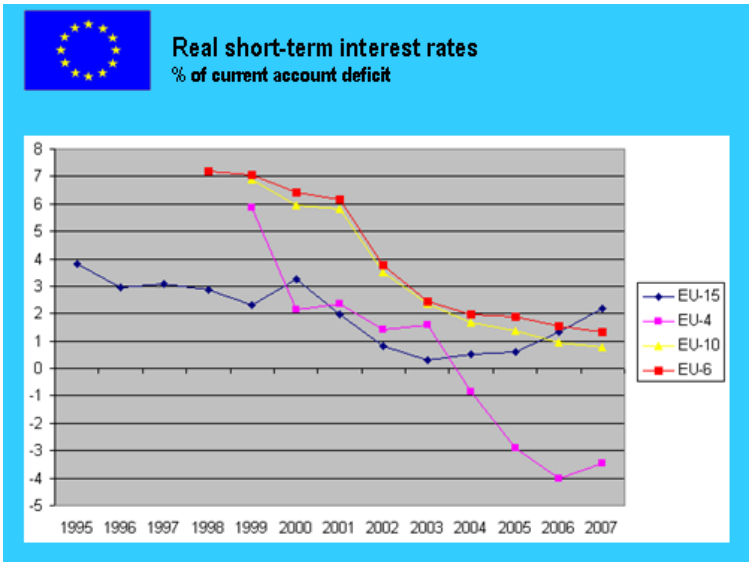

Over the last 10 years, the marginal efficiency of capital measured as the change of GDP over investment has been constantly higher in the new Member States than in the EU-15. Despite also trending upwards in the EU-15, the difference appears to be significant. However, for the 4 countries which have a quasi fixed exchange rate to the euro (Bulgaria and the three Baltic states), the marginal efficiency has peaked in 2003-05 and is now on a falling trend.

The high marginal rate of capital efficiency has its counterpart in a relatively high profit share. The gross operating surplus peaked in 2001 for the 4 countries which had fixed their currency, at around 50% of GDP. The EU-15 experienced a trough following the burst of the 'dotcom' bubble. Since

then, while the profit share for the new Member States remained high, it seemed to be on a downward path for the 4 countries with currency board arrangements.

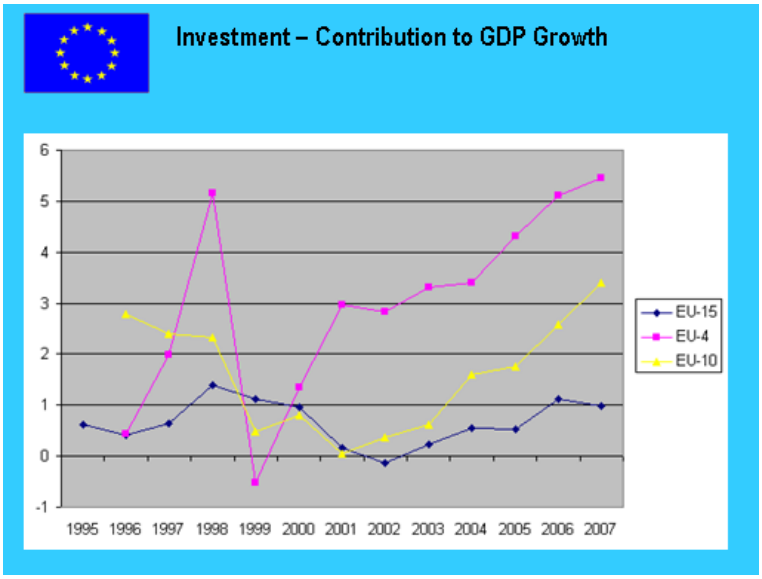
Given the high expected rate of return in the new Member States, the prevailing interest rate should be high, thereby guaranteeing an efficient selection of investment projects. Otherwise, there may be distortions in the intertemporal demand/supply developments. However, prevailing real interest rates were not much higher than in the EU-15. Given the exchange rate peg, the nominal interest rate of the euro area was imported as exchange rate risk premium was non-existing. More recently, real short rates even declined below those of the EU-15. In the EU-4 countries they even became negative due to accelerating inflation.

**Figure 3. Short-term real interest rates**




The question then arises, which demand components were stimulated by these favourable monetary conditions. Investment (and if so, equipment or construction), consumption or both? The following graph shows that investment in the new Member States contributed significantly to growth. In particular in the EU-4 countries, the investment ratio increased even more than in the EU-10 average or in the EU-15.

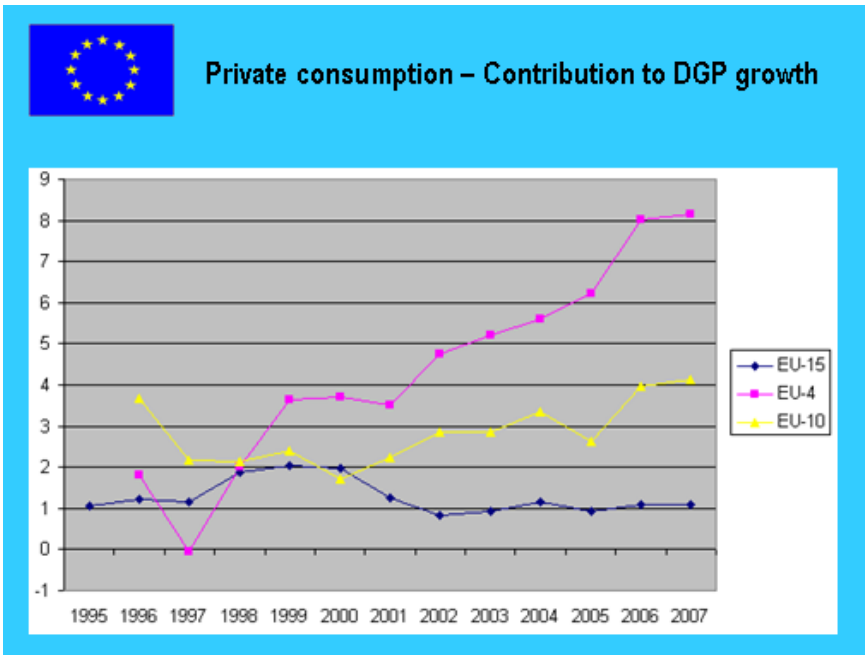
**Figure 4. Contribution of investment to GDP-growth**




However, a considerable part of such investment was construction and within this residential construction played a major part. On the other hand, equipment investment has turned out much less buoyant (even if it was fairly strong).

In an intertemporally optimal world, private consumption should react with some time lag to the improving development/catching-up process. Relatively high interest rates should stimulate private savings in the beginning of the catching-up process until higher supply will push the interest rates down. However, given the low interest rates in the new Member States already at the beginning of the catching-up, private consumption also contributed very significantly to GDP growth.

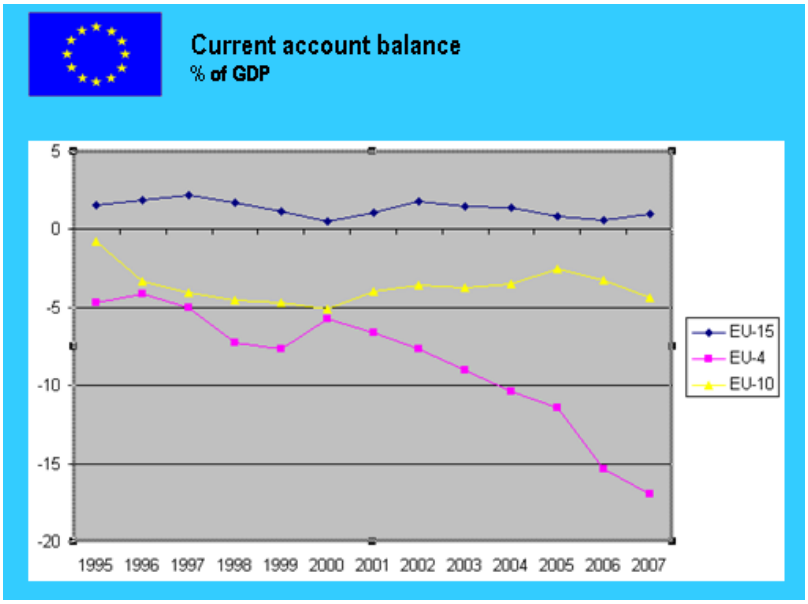
**Figure 5. Contribution of private consumption to GDP-growth**



Particularly in those countries (and especially in periods during which real interest rates turned negative), private consumption showed an unprecedented dynamic (EU-4 is the most notable example). But even for the EU-10, private consumption on average seemed to react to accommodative monetary conditions. The contribution to growth is steadily growing over time (since 2001).

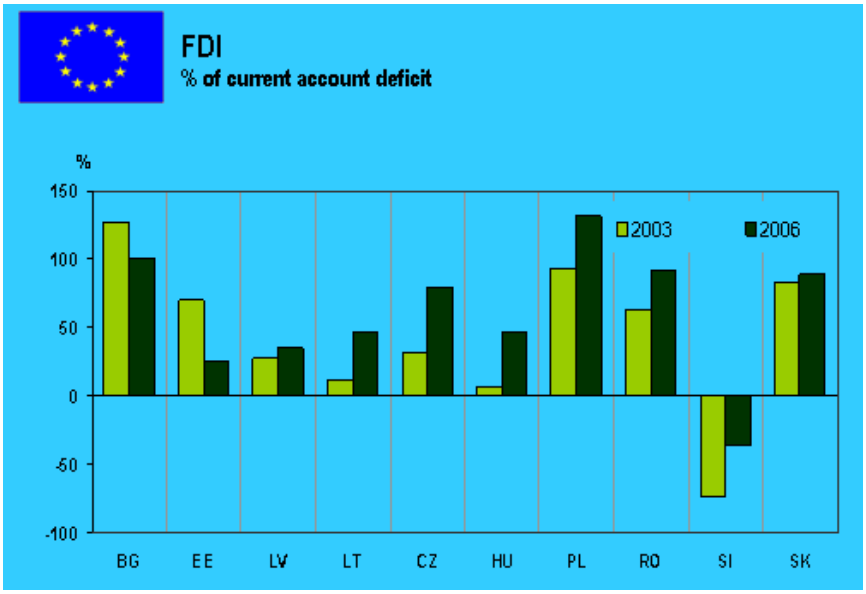
Obviously, high demand growth met with limited supply the gap being closed by net imports. Net exports contributed significantly negatively to demand growth in EU-4. In addition, current account deficits have reached very large numbers exceeding 20% in some cases.

**Figure 6. Current account balances**

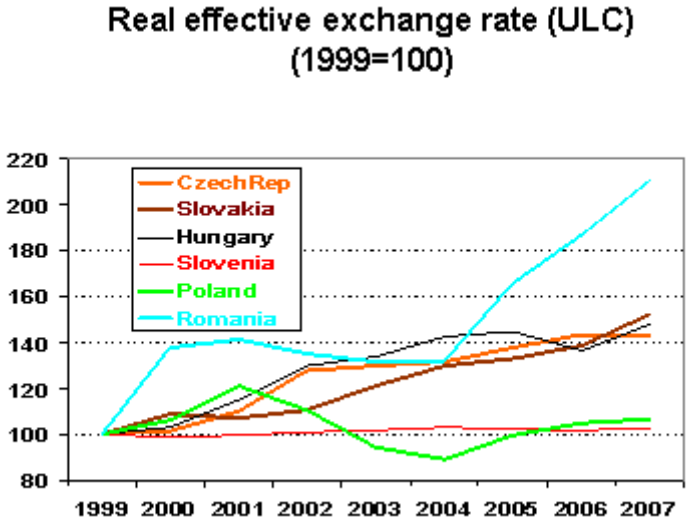



To a certain extent, of course, the catching-up process should be bolstered by foreign resources. If this reflects investment in productive capacity, there should be a correction as soon as supply is increased and domestic demand can be satisfied by growing supply. We have seen that the bulk of higher investment was investment in construction. It is thus unlikely that the growing stock of productive capital will be able to close the gap between aggregate demand and supply. From a financing perspective, high current account deficits should not pose a major problem if FDI is the counterpart. However, the share of FDI financing the current account deficits is shrinking. Therefore, growing net external liabilities are not necessarily being financed by growing income from new investment but must be covered by the current income stream.

**Figure 7. Net FDI inflows relative to the current account deficit**




The biggest challenge seems to be that the real effective exchange rate is appreciating quite rapidly, and certainly beyond the level justified by the Balassa-Samuelson effect. The Baltics and Bulgaria are among the fastest appreciating countries. The level of the real effective exchange rate is up to 40% higher than in 2000.




All in all, while public sector deficits are largely contained, private sector balance sheets exhibit heavy deficits, increasingly financed by credit creation. Taking into account that foreign currency denominated loans are also increasing rapidly, the balance sheet risk is growing.

Let me summarize the observations below:

Catching-up has been successful but there are signs of overheating in the "fixers" which could hamper efficient resource allocation and endanger further smooth real convergence.

Catching-up and free capital movements lead to strong appreciation of the real exchange rate, but with fixed nominal exchange rates, this takes place through high inflation.

Fixed exchange rates and overheating lead to high inflation and a real appreciation which is difficult to reverse.

This could be a lesson for the "floaters" that they should not peg their exchange rate too early or manage it too tightly.

Finally I would like to draw the attention to some risks which I do see in some of the catching-up processes.

First, in some countries, the current account deficits are excessively large. Although they are largely FDI-backed, the counterpart is not necessarily high investment in export-oriented investment, but rather residential construction. In terms of the saving-investment balance, the rising current account deficit also reflects overheating tendencies with inflation exceeding productivity growth. Thus, competitiveness deteriorates, over time negatively influencing the relative marginal efficiency of capital. It is not clear to what extent an eventual slowdown in investment would directly contribute significantly to a reduction in the current account balance. It may require a flexible response of the wage-price nexus to regain competitiveness and to foster FDI for productive uses of capital. Otherwise, a reduction of investment may translate into lower public sector savings, i.e. higher deficits of the public sector.

So far, the financing of the current account was not much of a problem. However, given the size of the financing requirement, at least from the perspective of the country concerned and less so from the size of the exposure of the respective banks, even slight changes in the macroeconomic parameters of the given economies or on financial markets may change the willingness of foreigners to finance the current account deficit. The exposure of some Western banks in the new Member States is high, and given the recent financial turmoil we have reasons to be worried what might be the consequences for some of the new Member States.

Given the need to finance the current account deficit as long as it persists, conditions, under which they are financed are crucial. So far, exchange rate commitments have reduced the risk premia for foreign borrowing. Even within the euro area, we have witnessed the re-emergence of bilateral spreads between government bonds, up to 75 bp between the Bund and Italian Government bonds.

As regards the new Member States, given the accumulation of external debt in addition to the current account deficit, the stock of foreign debt also has to be refinanced. Countries should undertake stress tests with regard to both a potential credit crunch and the re-emergence of interest rate risk premia.

A third risk relates to balance sheet risks. While the banking sector might be hedged with regard to open foreign exchange positions, the private household sector and the corporate sector appears to have been engaged in carry trade operations. We have recently seen significant movements in small country currencies, e.g. the Icelandic Krone. Any exchange rate movements may raise questions about the underlying imbalances in the economy. Again, respective stress test analysis appears warranted.

As a conclusion, it seems that macroeconomic risks and microeconomic behaviour are increasingly becoming inconsistent with a scenario of balanced long-term catching-up. Early policy responses both at the macro-level and the micro-bank "supervision" level appear to be urgently needed in some countries.

# Growth Patterns and Challenges in the Eastern Member States of the European Union (EEMS)

- Péter Bilek and Pál Gáspár (ICEG European Center) –

## Introduction

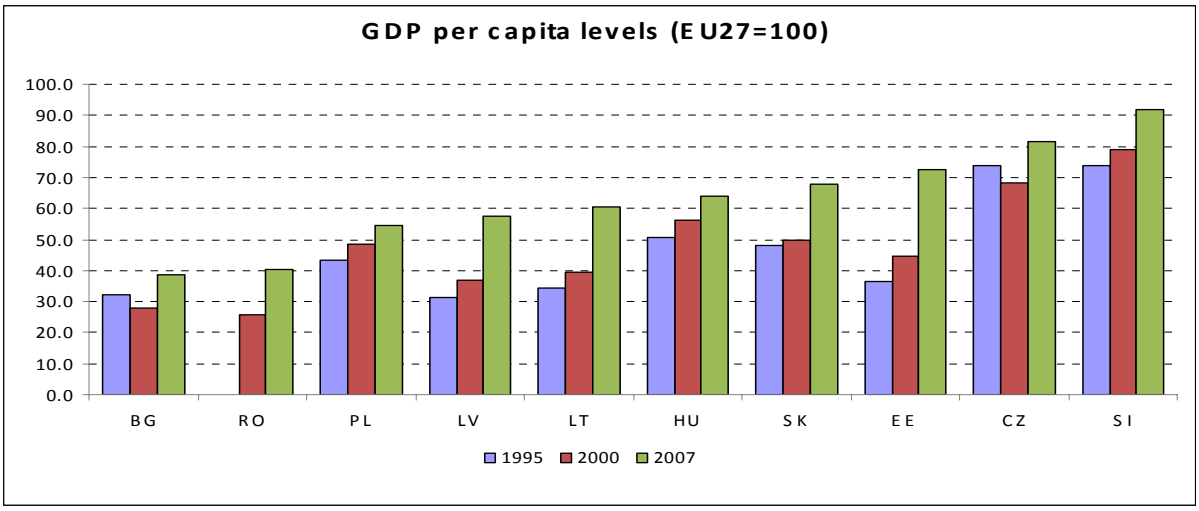
The Eastern Member States of the European Union (EEMS)1 have been characterised in recent years by country specific but altogether rapid income convergence towards EU-27 income level. Some of these countries have been among the fastest growing middle income economies, but the average growth of the 10 countries has also been in recent years around 5.5-6%. However, recently the external environment has worsened sharply for the EEMS, and actual and expected growth for these countries has sharply deteriorated. Besides external pressures, it turned out that fast growth has been unsustainable in several of them as it has been accompanied by rising inflation and unsustainably high current account deficit. These economies have become more vulnerable to exogenous shocks, have been strongly affected by global slowdown, and increase of fuel and food prices and by the changing risk aversion of investors. Both the global slowdown and the emerging vulnerabilities sharply worsen growth prospects of certain countries (especially the Baltic States and Romania).

The purpose of this study is to assess the short-term growth outlook of the EEMS and the main risks that affect their growth. The study begins with the overview of the main common long-term growth features of economic convergence and income catch up of the EEMS countries. The study then briefly overviews the main short term (2007-08) growth patterns of the EEMS by focusing both on their similarities and differences. The third part of the study analyses the main risks to growth in the EEMS and concludes with the some policy implications and conclusions.

## I. The long-term growth patterns in the EEMS

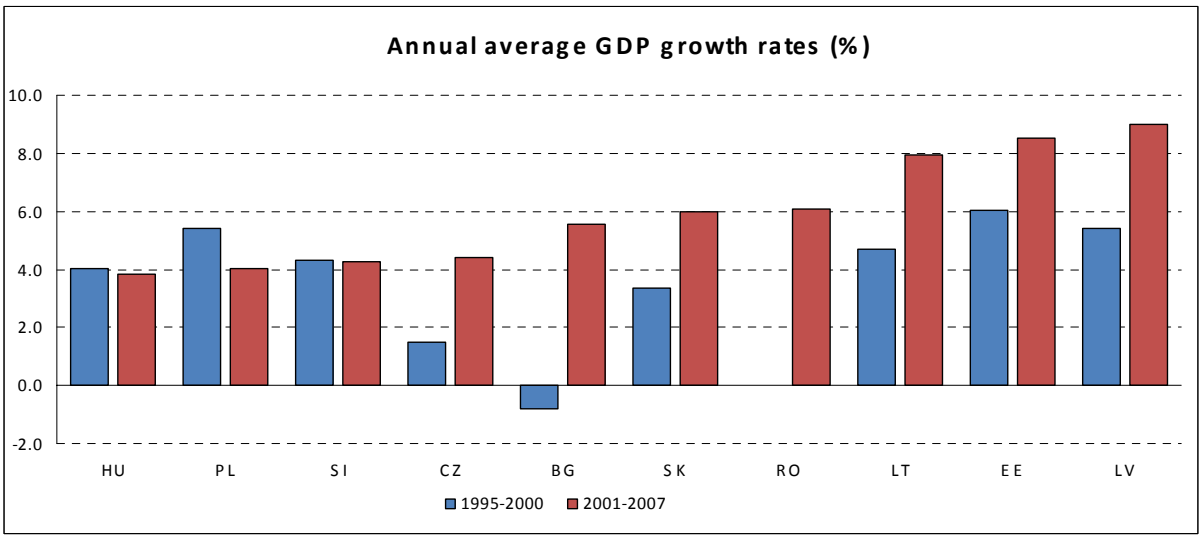
The EEMS countries performed relatively well in terms of economic growth in the last 12 years. Regarding the 1995-2007 period, the significant part of convergence to EU average was observable since 2000. In average the convergence reached 15 percentage points in the last 7 years. Per capita GDP (PPS) varied between 40% (Bulgaria and Romania) and 90% (Slovenia) in 2007, while the scope was 25-80% at the beginning of the new millennium. However, these figures show that there is room for further convergence in the next years. Most of them need at least 20-30 years to reach the EU average.

[1] This group of countries includes the eight countries that acceded to the European Union in May 2004 (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia) and the two new members (Bulgaria and Romania) joining the union in 2007.




*Source: Eurostat*

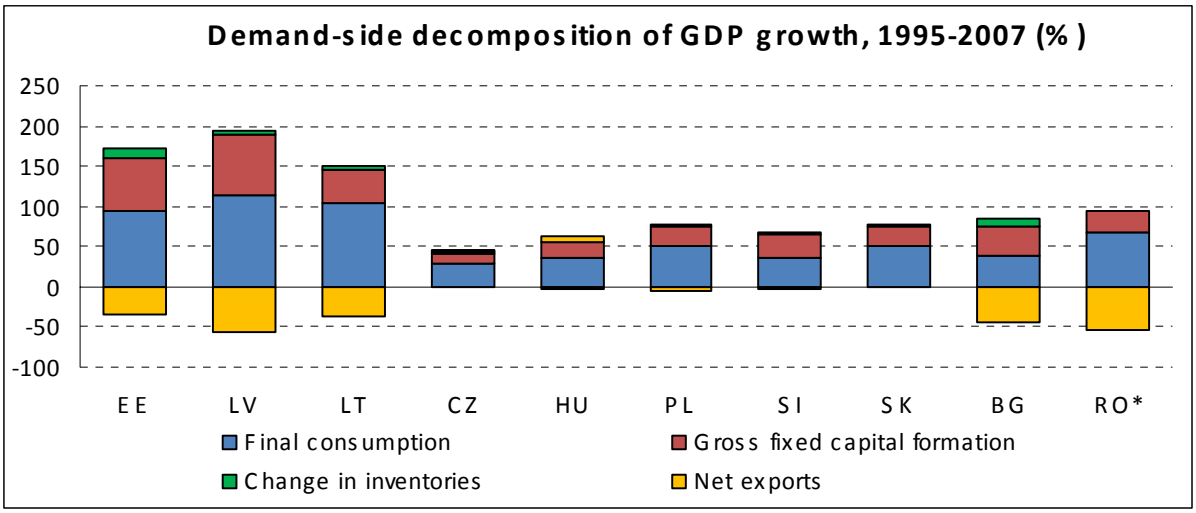
It is worth mentioning that growth pattern in these economies was country specific and was not homogenous in the region. Average economic growth rate in the Baltic countries[1] was higher than that in the CEE-5 countries[2]. Annual average GDP growth reached 8-9% in the B-3, while that in the CEE-5 countries averaged around 4-6% or significantly lower. Average growth rate in Bulgaria and Romania was between the two aforementioned country groups, reaching 6%. It reflects well the speed of convergence and initial income levels were in appropriate relationship, accordingly, the country with lower income reached higher growth rate in general.




*Source: Eurostat*

On the demand side, different factors explained economic growth in the aforementioned country groups. In the Baltic states net exports had a significant negative impact on economic growth, while consumption and investment played key role in high GDP growth. In the CEE-5 countries net exports were in balance and domestic demand had a lower growth rate in comparison with the B-3 countries. Bulgaria and Romania were again within the two groups in terms of demand side decomposition of growth, having negative contribution of net exports to growth and modest positive contribution of domestic demand.

[1] Baltic countries (B-3): Estonia, Latvia and Lithuania
[2] Central and Eastern European countries (CEE-5): Czech Republic, Hungary, Poland, Slovakia and Slovenia




*Source: Eurostat*

Investment played more significant role in the Baltic states, and it can be observable in the evolution of investment ratio as well. While investment ratio went above 35% of GDP in Estonia and Latvia in 2007, it was in the 23-30% range in the five Central and Eastern European member states. It is worth mentioning that investment ratio reached quite high rates (around 40%) in Asian emerging economies contributing to high economic growth. In terms of that comparison, the investment ratios in the CEE-5 countries seem fairly low. Capital played small role in economic growth in these economies. In Bulgaria and Romania investment ratio started to rise from a very low level in course of the 2000s and they reached about 30% of GDP in 2007, arriving between the two groups' average.

The evolution of employment indicates the same picture as capital. Employment rate increased to 65% in the Baltic states in 2007, while it stagnated around 55-60% in many CEE countries in the analysed period. Accordingly, while the creation of new workplaces contributed to growth in the Baltic states, jobless growth characterised the CEE-5 countries. In Bulgaria and Romania, employment rates were quite low but they started to improve slightly in line with dynamic economic growth in the last years.

Regarding productivity, total factor productivity (TFP) played a key role in convergence in the last 7 years, labour productivity improved significantly. Basically transition caused this improvement of productivity, contributing to economic growth. However a big question is that what happens when transition is over. Is this growth rate sustainable in the future? We analyse this issue in the next parts of this paper.

## II. The short-term growth patterns in the EEMS countries: 2007-08

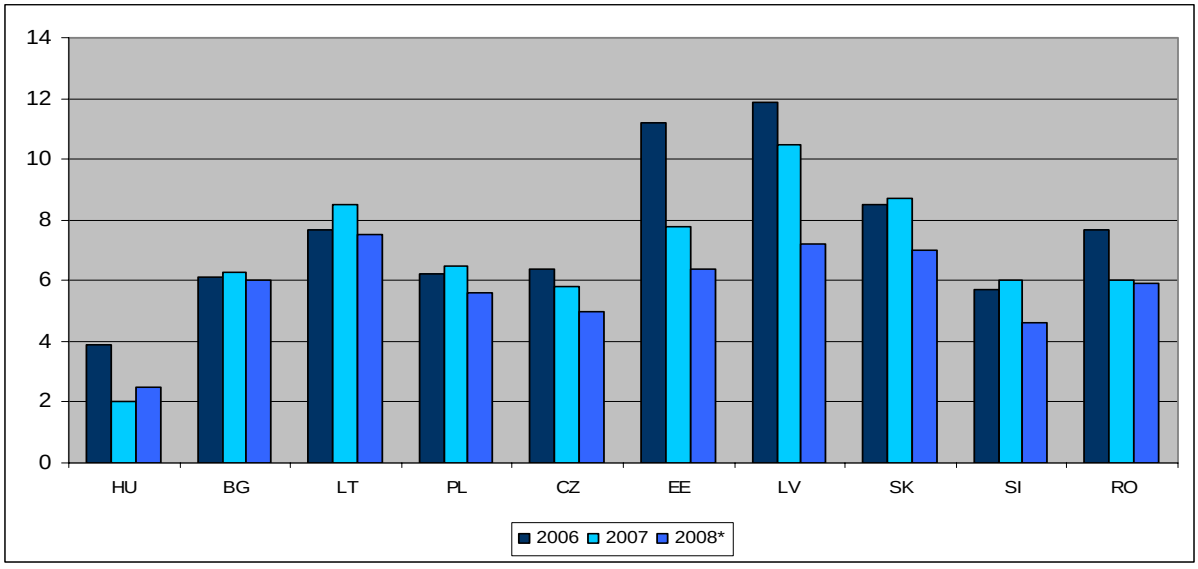
In relation to short-term output performance the EEMS countries can be divided to three main country groups:

- Group I (Romania, Slovenia, Slovakia, Lithuania, Estonia and Latvia): decelerating but still high growth and smaller overheating
- Group II (Bulgaria, the Czech Republic, Poland) fast and almost unaffected growth
- Group III (Hungary): Gradual recovery from stabilisation driven recession

While economic growth differs among the EEMS, the composition of growth reveals similarities among the countries. First, growth in 2007 and most likely in 2008 has been almost exclusively driven by domestic demand except two countries which show different pattern. One is Hungary, where domestic demand has been declining sharply after the 2006 stabilisation, and growth has been exclusively driven by the expansion of net exports. Slovakia is the other country, where net exports are the main source of growth, as earlier export oriented investments have been maturing leading to fast increase in exports.

Contrary to them in most of the EMS net exports have been declining due to the slowdown in export growth. This is due to the slower growth in foreign demand, increasing competitiveness problems – especially in the Baltic and South Eastern European countries – associated with wage increases exceeding labour productivity growth, though productivity has still been growing fast.

**Chart. GDP growth in the EEMS countries**




*Source: ICEG European Center Quarterly Forecast on EEMS, 2008*

Within domestic demand the contribution of private consumption to growth has been moderating in most of the countries notwithstanding the fast increase in real employee compensation and nominal wages in most of the EEMS. But their positive effect on private consumption has been increasingly overcome by other powerful factors constraining the rise in private consumption. One is the increasing private sector debt and related debt service. In recent years most of the countries experienced a fast rise in lending to households and the private sector, which has led to its increasing

debt level. This is now accompanied by rising interest rates, higher real interest rate levels, which increase private sector's debt service and make the household sector more cautious in its consumption spending. A related element is the worsening of the net worth of households due to the depreciation of local currencies, which increases the local currency value of private sectors' foreign currency debt.

The final element of declining private consumption is related to wage and employment developments. In most countries real employee compensation and nominal wages have been on rise, but their growth has been partly neutralised by the decline in employment. Employment started to decline reflecting worsening growth prospects in the private sector and /or effects of austerity or restructuring in the public sector. As a result of this employment dynamics the extent of rise in real wages is not in line with the evolution of private consumption.

Contrary to previous years, when public sector consumption has positively contributed to growth, public consumption either declines (Hungary) or remains very moderate (as in the Baltic countries) reflecting problems with rising inflation and current account sustainability.

Finally, both short- and medium-term is badly affected by the evolution of private investments. In most of the EEMS private investments started either to slow down or in some countries (notably Hungary) they have even declined. The growth of private capital formation reflects worsening external demand and tighter financing conditions as both banks became more cautious in their lending compared to earlier years and companies have to face more exchange rate vulnerability in their foreign borrowing.

## III. The main risks to growth

While growth is expected to slowdown in most of the EEMS countries there are serious risks affecting their growth performance. Among the main risk factors the following seem to be the most relevant and wide ranging:

- exposure to external shocks
- accelerating inflation and rising inflationary pressures
- sustainability of current account imbalances and associated external vulnerability
- wage pressures and labour market frictions
- fiscal policy

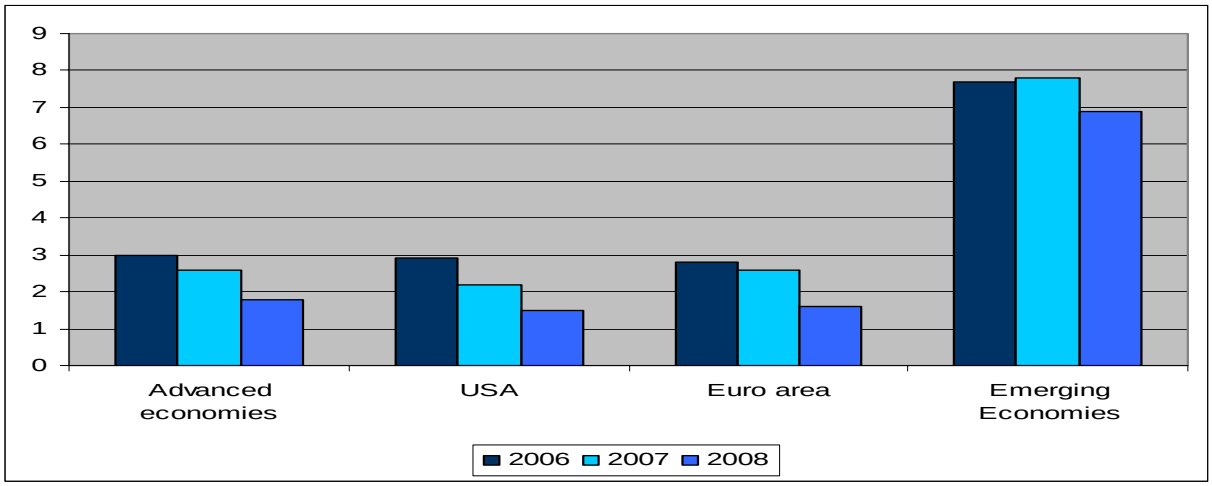
These risks are now assessed in more details, focusing on the elements common to most of the EEMS countries.

### III. 1. Exposure to external shocks

The spill-over effects of the USA real estate and lending crisis have adversely affected most of the emerging market economies due to worsening investor sentiment, increased risk aversion of investors, portfolio readjustment by big international investors following their losses in the sub-prime crisis and slowdown of the advanced economies. While the main trends also affected the EEMS countries, there are several features, which mitigate the negative effect of the sub-prime crisis on their growth.

First, these countries have lower than the emerging markets in general exposure to US markets and financial shocks. The direct effects of the sub-prime crisis remained negligible, while the indirect ones came mainly from the slowdown of the euro-zone growth, increased exchange rate volatility. The share of USA in their foreign trade is negligible, and while the slowdown has also affected the export growth to their main market the euro-zone, their trade has become more diversified in recent years, growing fast to among each other and towards other Eastern European countries (most notably Russia) which mitigates the demand effects of the crisis.

**Chart. Slowdown in output growth**




*Source: ICEG European Center Quarterly Forecast on EEMS, 2008*

Second, while these countries have in recent years experienced fast rise in the borrowing by and indebtedness of the private sector, overall credit growth remained below the level seen in countries most affected by the sub-prime crisis. Moreover increase in private sector lending started from low levels, increased to sustainable and healthy levels after years of fast growth without seriously threatening the stability of the financial sector. The banking sectors in the EEMS are stable with the majority of the sectors consisting of foreign owned, well capitalised, strongly regulated, highly profitable banks. Therefore the spill-over effects caused by the sub-prime crisis will not be felt by the banks in these countries and this will not have serious real sector implications.

While these features of the EEMS suppose to mitigate the adverse effect of external shocks, there are some difficulties which these economies face. First, due to significant current account imbalances, rising domestic inflation and demand pressures some of these economies (the Baltic States, Romania) are increasingly exposed to changing investor sentiment. This is reflected partly in rising interest rate premia or in countries with flexible exchange rate regimes in the depreciation of local currencies.

Second, the changing investor sentiment and the exposure to it is also seen in the enhanced exchange rate and asset price volatility some of these countries experience compared to previous years. So far, this effect materialised without serious real sector implications, however this may change in the short-term future as exchange rate volatility may have an adverse effect on tradable investments.

Finally, some of the EEMS are stronger integrated and have strongly correlated business cycles with the Euro-zone, which is expected to slowdown more than the average of the slowdown in advanced economies, with its negative effect on export dynamics of EEMS countries. The Central and South-eastern European EEMS countries have trade higher share of their output with the Euro-zone than the Baltic States, which still have strong trade ties with the CIS region and therefore the slowdown of the Euro-zone may have stronger implications for these EEMS countries.

## III.2. Accelerating Inflation

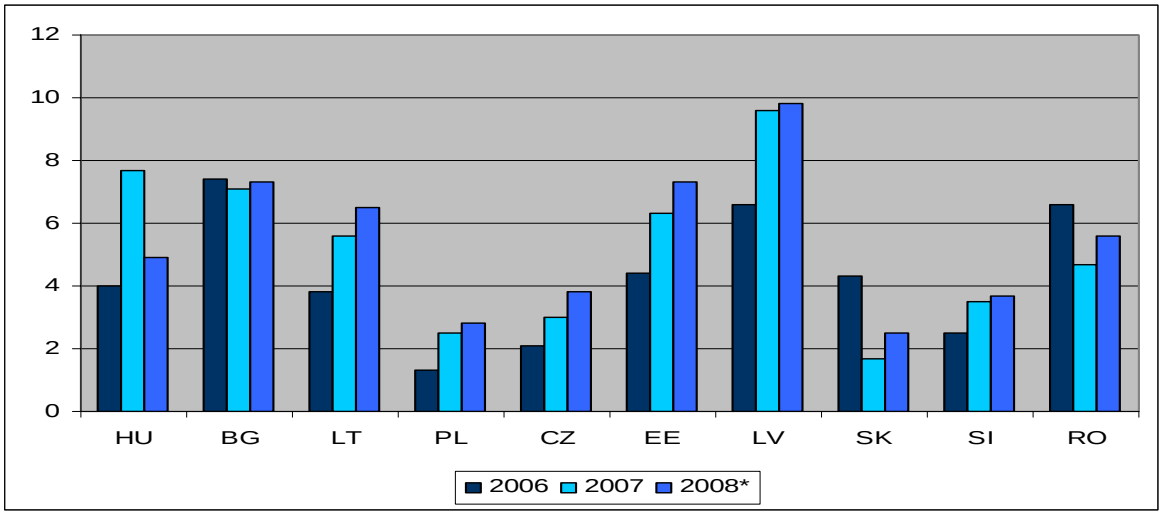
The rise in inflationary pressures is the second macroeconomic threat to growth in the EEMS countries. The average increase in consumer price indices for the 10 countries was 4,3% in 2006 and 5,2% in 2007 and it is expected to be around 5,4% in 2008. Within that the Baltic States have the highest inflation ranging between 6,5% and 10% in 2008, but Romania and Bulgaria also face rising inflationary pressures. In Central Europe inflation is either lower though on rise (the Czech Republic, Poland, Slovakia, Slovenia) or has been declining following stabilisation pick up (Hungary).

While the level of consumer price increases and the specific factors causing them are mainly country specific, there some common factors behind accelerating inflation. First, these countries are exposed to the inflationary consequences of rise in oil and food prices, part of which is speculative and cyclical, but some elements seem to be permanent. These countries are oil and gas importers and changes in international energy prices strongly affect their core and consumer price inflation indices. Besides rising import prices, the unfavourable terms of trade changes have secondary spill-over effects on processed food prices, service prices, which accelerate inflation in these countries.

The second main factor of accelerating inflation is the fast rise in nominal wages and employee compensation, which led to significant real wage and ULC increases. Real compensation per head is expected to increase on average between 2006 and 2008 by 9.7% in Lithuania, 11% in Estonia, 12% in Romania and 14,5% in Latvia. Fast increases in nominal wages are caused by variety of factors, including rising labour market shortages (especially in the Baltic States and Poland/Romania EU accession brought significant outflow of labour force), labour market mismatches (most countries have low employment levels due to labour market rigidities, insufficient education and training systems). While the slowdown in output growth, the decline in company profits will squeeze the scope for wage increases, these factors are permanent and therefore will put a pressure on wage increases.

Accelerating inflation has also been caused by fast increasing domestic demand generated by easing liquidity constraint, fast rise in lending to the household sector, changing demand towards services. Combined with wage and other cost pressure this has produced especially high price increases in the services sector. Finally, in some of the EEMS countries accelerating inflation is caused by the adjustment of administrative prices as a part of price liberalisation or fiscal adjustment related subsidy reduction.

**Chart. Harmonised index for consumer prices in 2006-2008**




*Source: ICEG European Center Quarterly Forecast on EEMS, 2008*

What are the risks of higher inflation for growth? First, the factors causing accelerating inflation in most of these countries contribute to the rise in inflationary expectations, which will have a second round effect on wage increases, rise in non-tradable prices, exchange rate evolution.

Second, the rise in inflation creates new difficulties for monetary policies. On the one hand monetary policy is inefficient in most of exchange rate arrangements to curb inflation alone, but fiscal and incomes policies have been pro-cyclical, insufficiently flexible and have in many countries fuelled inflation. There has been in several countries an inappropriate mix of monetary and fiscal/incomes policies, which didn't serve disinflation.

On the other hand central banks face a difficulty as they need to increase interest rates or maintain at high levels, but they should consider the consequences of economic slowdown and rising financial vulnerability, and the uncertain interest rate policy of the FED and especially of the ECB. Rising inflation may become a serious threat to growth requiring both more conservative fiscal and incomes policies, strict monetary policies and worsening the expectations of the private sector.

## III. 3. Current Account Deficits and External Vulnerability

The current account deficit problem appears to affect only half of the analysed countries. The Baltic States have traditionally had high, double digit current account deficits, which were sustained thanks to capital inflows, fast economic growth, increase in income levels and credibility of the applied monetary arrangement. Especially Latvia and Lithuania have serious current account imbalances, while in Estonia the slowdown has been accompanied by some improvements in the deficit.

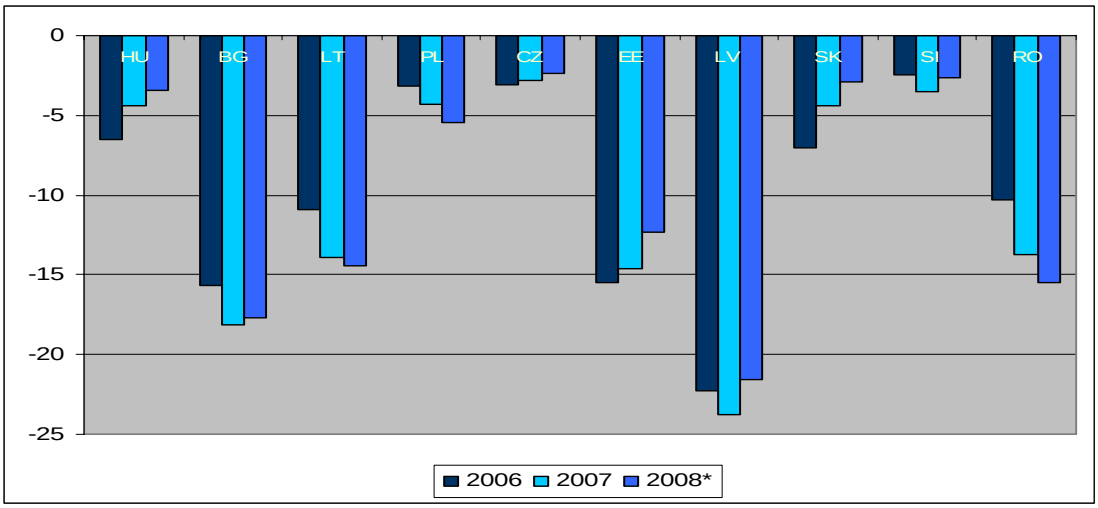
Besides them Romania and Bulgaria have experienced in recent years a fast increase of current account deficit due to rise of domestic investments and consumption uncovered by domestic savings. Their current account levels are on par or even exceed the high deficits of the Baltic States. In Central Europe the current account deficits (which ranged between 2.8% of GDP in the Czech Republic and 4,4% in Hungary and Slovakia) are manageable and don't constitute a real threat to macroeconomic stability and growth.

However there is an increasing external vulnerability problem in case of the South-eastern European and Baltic EEMS countries due to persistently high current account deficits and rising foreign debt.

The increase of foreign debt is a threat for some other countries as well for example Hungary, where low current account deficits are accompanied by rising foreign debt.

In countries using pegged exchange rate regimes (Latvia, Estonia, Bulgaria) the high current account deficits are caused by increasing consumption and dissaving of the private sector, while in countries with more flexible arrangements the public sector deficit also contributes to current account imbalances. The current account deficits are financed by capital inflows, but contrary to the past only in Bulgaria, Poland and the Czech Republic are foreign direct investments able to cover 100% of the current account deficit. Net FDI inflows worsen due to increased outward foreign direct investments (OFDI) from these countries, rising profit repatriation and negative effect of global relocation of foreign direct investments to BRIC countries.

**Chart. Current account balances/GDP**




*Source: ICEG European Center Quarterly Forecast on EEMS, 2008*

In Hungary, foreign portfolio investments, in the three Baltic States and Slovenia foreign bank lending are the main drivers of financing, but this leads to the rise of gross and net foreign debt of these countries. This represents a concern for policy makers and investors, leads to increased vulnerability of these economies though the level of foreign debt is at different levels as it represents 38% of GDP in Romania, 90% in Bulgaria, Hungary and Slovenia, while over 100% in Estonia and Latvia.

The main negative impact of rising gross and net external foreign debt on growth is related to deepening vulnerability and sustainability concerns, excessive exchange rate turbulence associated with it and future decline of foreign direct investment inflows

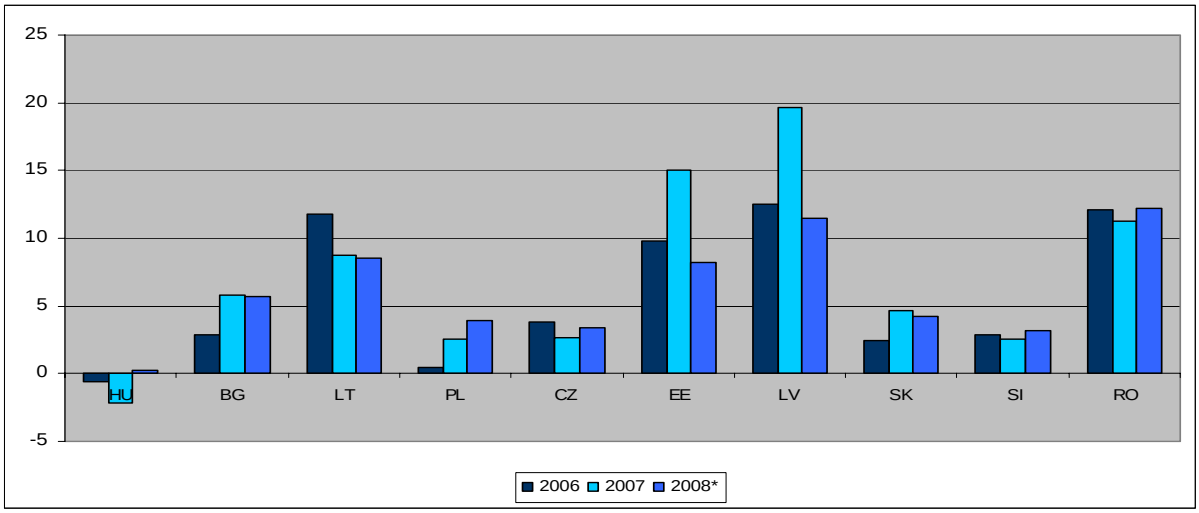
## III. 4. Wage pressure and labour market problems

A further threat to short-and medium term economic growth in the EEMS is related to labour market trends. First, in recent years – as shown in the chart presenting the rise in real compensation per head – there has been a very strong nominal wage increase fuelled by labour shortages, labour market mismatches, rise in public sector wage levels. This has resulted in a significant rise in real wages, which has only recently been moderated by the accelerating inflation.

Second, while real wage growth moderated in the last 12-18 months unit labour costs (ULC) exhibit a fast rise due to the combination of fast nominal wage increases and slowdown of productivity growth. In recent years the earlier advances in competitiveness have been partly neutralised by the rise of unit labour costs.

Finally, the slightly lower but still considerable migration, the supply side shortages related to skill mismatch, the lack of human skills required by the markets and existing labour market rigidities (minimum wages, in some countries high degree of employment protection levels (EPL), etc.) are expected to maintain the wage pressure.

**Chart. Changes in real compensation per head**




*Source: ICEG European Center Quarterly Forecast on EEMS, 2008*

What problems are created by wage pressures and labour market problems for economic growth? First, the rise in unit labour costs has partly eroded the competitiveness of the tradable sector, which may have an adverse effect on the rise of exports amidst declining demand in advanced countries

The rise in nominal wages accelerates inflation in the non-tradable sector, where wage costs represent the main source of inflationary pressure. Prices in the non-tradable sector have been rising in recent years faster than in the tradable one due to the Balassa-Samuelson effect, shifting demand towards labour intensive services, rise in other than wages costs of producers. The rise in nominal wages has added a momentum to the Balassa-Samuelson effect, strengthened the demand side factors of inflation, and put the non-tradable prices under significant pressure.

The final problem that wage pressures and labour market distortions may create to economic growth is related to the efficiency of monetary policy. In economies with pegged exchange rate regimes, the hands of monetary authorities are tied and this difficulty is amplified by the inappropriate incomes policies and in some cases to ambitious wage increases generated in the private and public sectors.

## 5. Fiscal stance

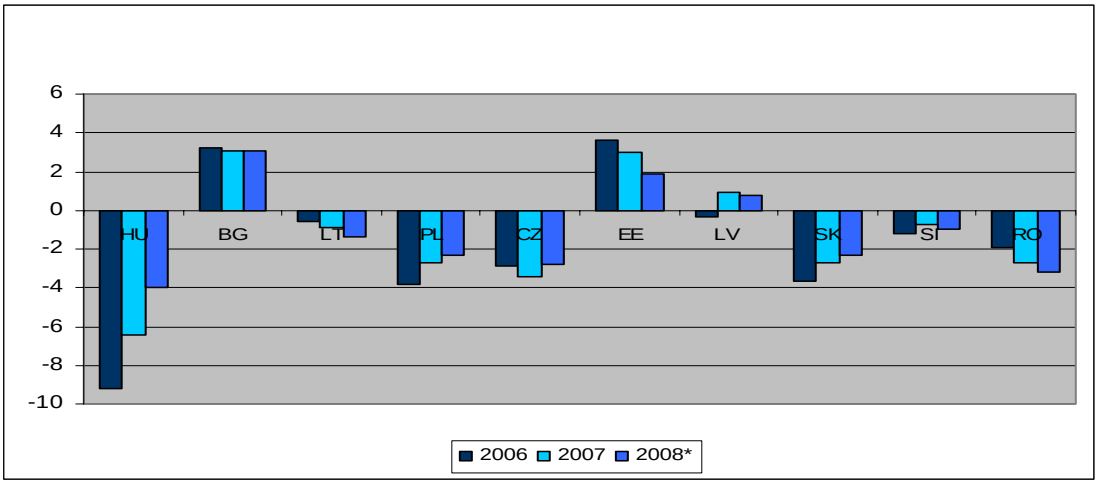
The good news concerning the fiscal stance in the EEMS is that in 2007 there was a better than expected performance due to higher revenues. Extra revenues were collected by the fiscal authorities due to fast income growth, higher inflation, improved tax discipline and better tax collection. At the same time in 2007 only Hungary, Latvia, Poland, Slovakia and Slovenia were able to reduce their structural deficits, while the deficits increased in other countries. The relaxation of fiscal policies seems to continue further as in 2008 fiscal balances are expected to worsen in the Czech Republic, Latvia, Romania, Lithuania and Estonia (actually in the latter case the surplus declines).

Besides the fiscal balances the decline of debt/GDP ratios (which is a welcome phenomenon) is caused mainly by temporary factors, which may be reversed even in the short term. The decline is driven by the faster GDP growth and increasing revenues caused by widening revenue base and not by the decline of the nominal debt level and expenditures. In countries with high expenditure level the reduction of expenditures is driven ether by declining interest spending (Hungary, Romania and the Czech Republic) or lower public sector capital formation (Romania)

At the same time there are ambitious plans for tax reductions: corporate income tax rate is reduced in the Czech Republic, social contribution rates go down in Poland and Romania, personal income tax rates are cut in Bulgaria, the Czech Republic, Estonia, and Hungary plans to reduce tax burden by 1,5% of GDP. On the other hand expenditure reduction is difficult: inherited entitlements, the rise of wages in public sector amidst overall wage increases and labour market pressures, increasing national contribution to Structural Funds related financing and other issues make it difficult to cut them.

Altogether one can observe some relaxation of fiscal policies, which is a problem especially in economies which either still have high fiscal imbalances or have high growth of private sector spending, which should be compensated by the decline of demand impulse from the public sector. Moreover, except some minor changes, there have been no significant shifts in the composition of expenditures, which may hamper growth as they are biased against growth enhancing ones.

**Chart. General government balance/GDP**




*Source: ICEG European Center Quarterly Forecast on EEMS, 2008*

The worsening fiscal stance also brings some problems for growth in the EEMS. First, it increases the vulnerability of these countries to exogenous shock, investor sentiment. For example in Estonia, Latvia, Lithuania and Romania fiscal balances worsens amidst increasing and high current account deficits, which deepens investors' concern regarding the sustainability of macroeconomic policy mix. Many countries should have more conservative fiscal policies in order to neutralise the effects of fast

rising domestic demand. Second, fiscal loosening is generally unfavourable for structural reforms, which these countries strongly need especially on the expenditure side.The quality of expenditures is overall weak in these countries, the share of productive spending remains low: fiscal loosening may postpone further these reforms.

## IV. The common and country specific policy issues

- Fiscal stance: fiscal policy altogether should be tightened in countries with unsustainable CA deficits and soaring inflation (B-3, SEE-2)
- 
- Market reforms: deregulation, liberalisation, easing market entry in network industries to increase productivity and reduce inflationary pressures
- 
- Labour market reforms: increased labour market flexibility, education and training sector reforms to reduce labour market mismatches and wage pressures
- Financial sector: tighter surveillance on banking sector lending to reduce excessive and unsustainable rise in private sector borrowing and exposure

## CEE Banking – Coping with the Challenges of a New Global Environment

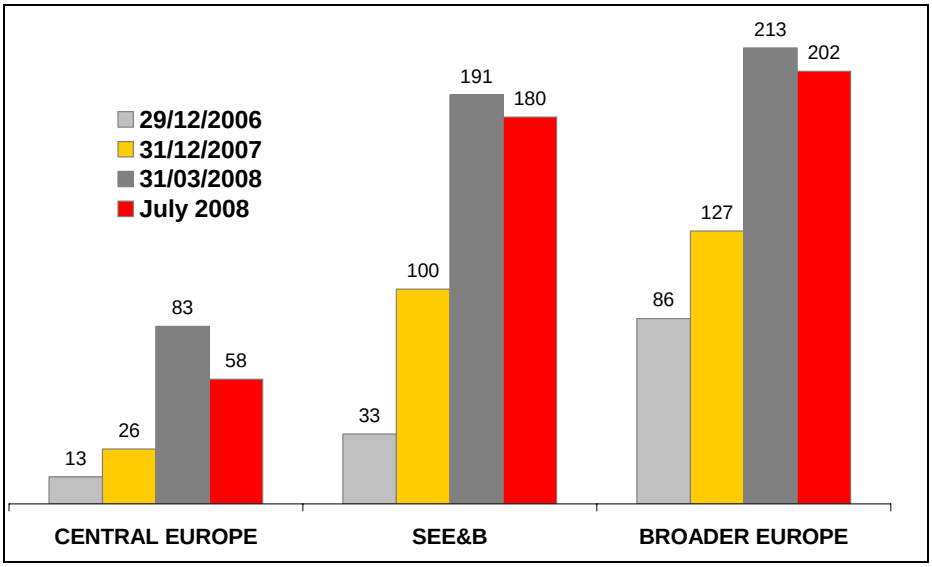
- Matteo Ferrazzi and Debora Revoltella (UniCredit Group) –

*Global risks are testing Central and Eastern European economies: vulnerabilities are arising. The new international environment reveals long-term weaknesses especially in Southeast Europe and in the Baltics. Even more serious concerns arise for Kazakhstan in the short term. But the region as a whole is resilient.*

Lower growth in the US and the eurozone, and a general re-pricing of risk are the main features characterising the new global environment following the subprime concern since 2007. Volatility in the markets has increased, as well as uncertainty. Even if proactive monetary policies lead to fast declines in interest rates in the US, still, the risk of a potential deeper slowdown remains. Other central banks (including ECB) are reacting to the new environment with higher interest rates, to fight the inflationary pressures. Stock markets lost 30% of their values in Europe and 15% in the US in less than one year. Oil prices doubled in the same period.

Uncertainty about the true size of international banks' write-offs related to the US sub-prime crisis is keeping markets on a negative mood. "Re-pricing " of risk at international level is also clear: CDS spreads (credit default swap, an indication of the risk priced by financial markets) have doubled or tripled since July 2007 and the Central and Eastern European (CEE) region was not an exception. Moreover, international investors are starting to be quite selective, penalising especially those countries, which show greater imbalances. Many countries in the CEE region have extremely high external imbalances and depend on external financing (given the limited availability of domestic savings compared to their investment needs).

**Figure 1. Credit default swap spreads (over 5-year USD)**




*NOTE: CDS are weighted by the GDP of each country; Source: Bloomberg*

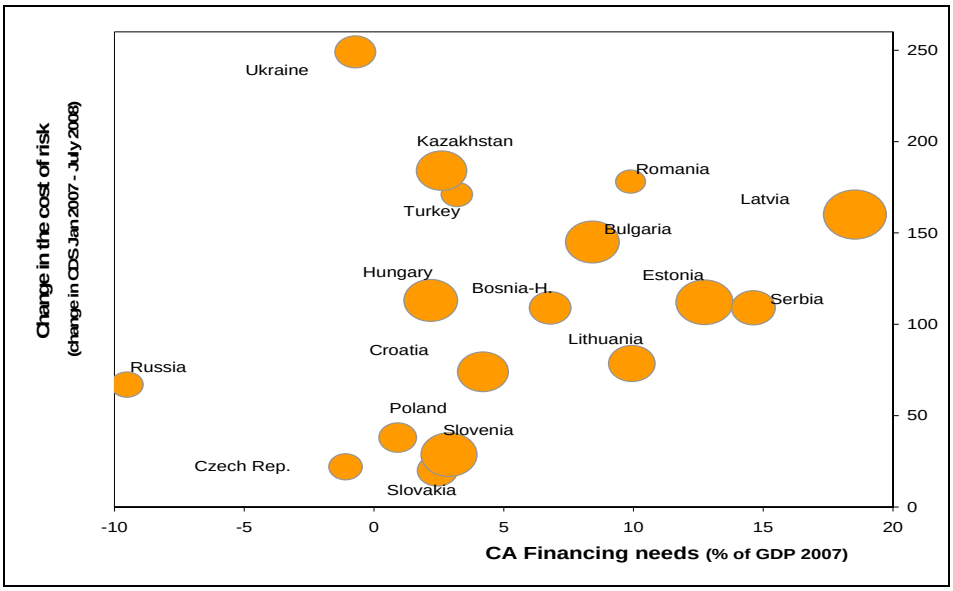
How CEE economies are reacting to the global turbulence? What is the perception of financial markets of the current position of CEE countries? Two main possible contagion channels can affect the CEE economies, namely a tightening of credit conditions (financial channel) and low eurozone demand (real channel, trough a slowdown of trade flows).

The usual growth drivers remain supportive in CEE. Consumption is fuelled by rising household income and declining unemployment, though high inflationary pressures and tighter monetary conditions are leading to some moderation. Despite credit tightening, prospects for investment activity remain positive thanks to a relatively booming corporate sector and a number of infrastructure projects financed by structural funds (in EU member countries) or investment and growth funds (in former CIS countries). Lower growth in the eurozone and rising production costs will be reflected in some pressure on export performance of CEE countries. Foreign direct investments (FDI) and M&A deals could also be affected as they are also suffering the global uncertainty. Still, the CEE region remains competitive in absolute terms and selected industries might even benefit from international companies' decisions to maximise the return on their past delocalisation strategy. Moreover, oil and raw material prices remain supportive for former CIS countries (in terms of current account, fiscal balance and economic performance).

However, it's very clear that vulnerabilities are arising: in particular, financing domestic growth with international savings is now an issue. In recent years most countries in the region have been relying on external savings (from abroad) to finance their growth. Rising current account deficits were financed by foreign direct investment, but also by accumulation of external debt. The banking sector has also played a role, with strong lending growth – one of the main drivers of the retail and investment boom - being largely financed from abroad. In 2007 the region has attracted roughly EUR 100 bn of international debt, while the banking sector has almost doubled the net access to foreign funding.

The "re-pricing " of risk at international level has led to a hike in the cost of such external financing, enhancing the risk of some general tightening of credit conditions. Countries with bigger external imbalances and greater dependency on foreign funds are also those, who face the bigger increase in the cost of risk, thus being more likely to suffer from some credit tightening. The countries with the higher banking sector dependency on foreign funds are the Baltic states, Kazakhstan and Romania. The countries with the highest need to finance the current account are the Baltics and Southeast Europe (Serbia, Romania, Bulgaria).

**Figure 2. Current account financing needs and the increase in the costs of risk**




*Note: Current account financing needs have been estimated as: CA – (FDI – FDI real estate – FDI financials); Source: UniCredit CEE Research, Bloomberg, Statistical offices*

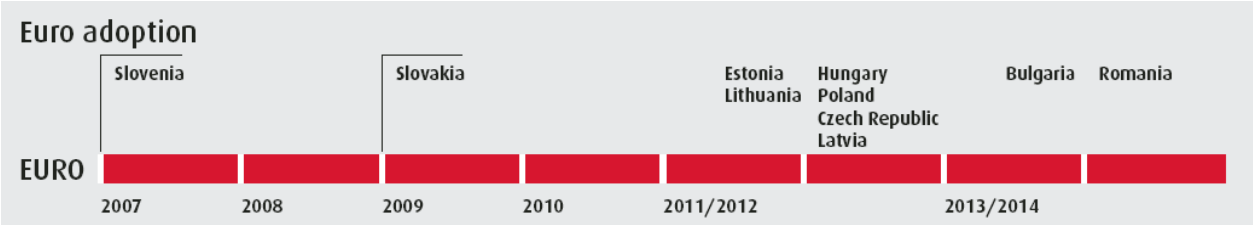
## Central Europe: very resilient to the new international environment

The response to the crisis among Central and Eastern European countries will not be homogeneous. Central European countries (Poland, Hungary, Czech Republic, Slovakia, Slovenia) are largely unaffected, with some cyclical tightening on the cards. Countries in the region are less sensitive to a possible credit squeeze, as external imbalances are under control and the cost of risk, despite increasing sharply, remains relatively low. The currencies of the Czech Republic, Poland and Slovakia strengthened in recent months. It should be noted that the strong pace of growth, combined with inflationary pressures, suggests some counter-cyclical tendencies where the euro zone is concerned – this might become an issue for Slovakia, which is entering the euro zone at the beginning of 2009 and should then adopt an easier monetary policy stance, and for Slovenia, which entered the euro zone in 2007. The other countries are not rushing to adopt the common currency, as an effect of lack of political willingness and difficulties to fulfil the Maastricht criteria (on deficit and inflation).

Hungary remains the country with the weakest macroeconomic environment in Central Europe, still reaping the consequences (especially in terms of growth) of the fiscal correction measures. The country is the most sensitive in Central Europe to the deterioration in the global environment, as evidenced from the increase in country risk (based on developments in credit default swaps).

The consequence of the re-pricing of risk at international level for the banking sectors of Central European countries will not be dramatic: some moderation in lending volumes can be expected, however, all in all profit growth for Central European countries is expected to remain double digit in the next three years.

**Figure 3. Years of eurozone accession**

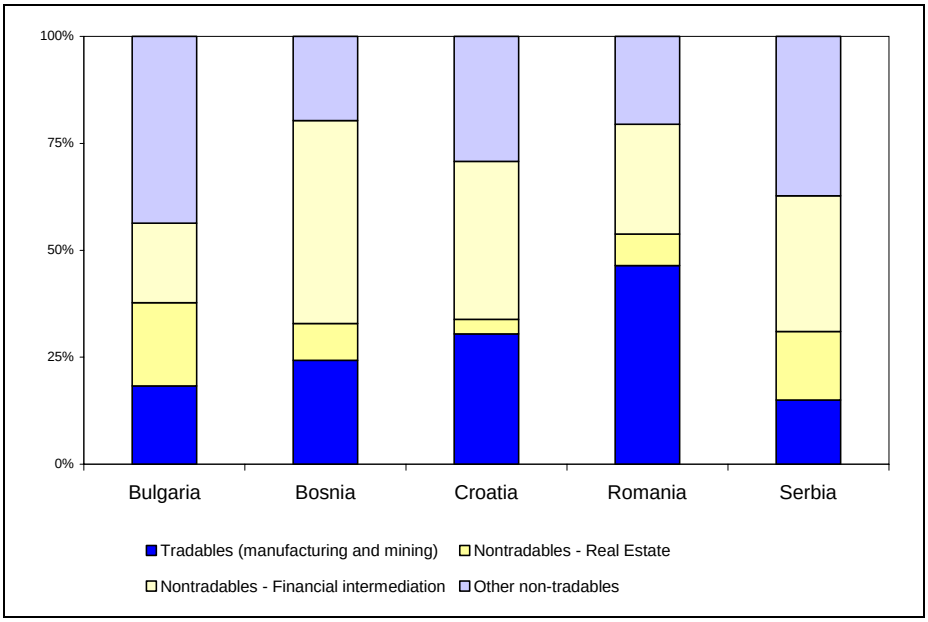



*Source: UniCredit CEE Research*

## Southeast Europe and the Baltics: more vulnerable

The new international environment reveals long-term vulnerabilities in Southeast Europe and in the Baltics (the two areas, despite geographically far, have some common problems in terms of macroeconomic imbalances). These economies are expected to slow down in the next years. All these countries have small and very open economies, which have largely financed their growth in recent years from external savings. Such funding has come in the form of foreign direct investment (FDI), but also in the form of external debt, with the – largely foreign owned – banking sector playing a role. Global re-pricing of risk has particularly hit these countries in view of their structural imbalances: such an increase in the cost of risk is likely to lead to some moderation in capital inflows. The financing of the large current account deficits (imports are by far higher than exports) is key: in recent years a large share of FDI was directed towards the nontradable sectors (i.e. FDI with less export potential), especially real estate.

**Figure 4. Foreign direct investments: tradables and non-tradables**

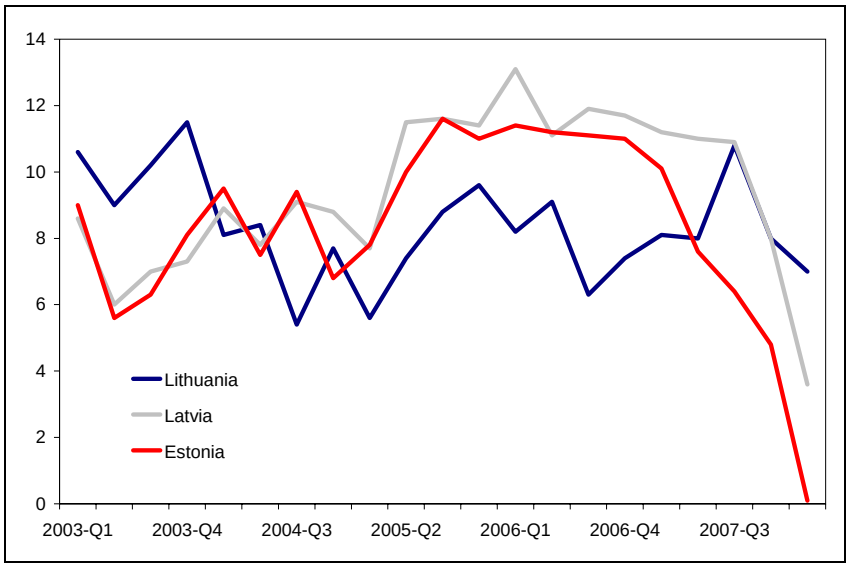



*Source: UniCredit CEE Research*

Some slowing in growth can even be considered a welcome phenomenon in the Baltics, where overheating concerns were repeatedly addressed in recent years. The increase in the cost of risk is leading to some credit tightening and the slowdown of these economies is very sharp, especially in the case of Estonia and Latvia. Rating agencies lowered the rating or the outlook in recent months for all three countries. Local currency markets are pricing in some devaluation risks (the three countries have either explicit currency board regimes or peg unilaterally to the euro), but very

minor: the market is, however, possibly too shallow for speculative attacks. Locals are gradually increasing the share of foreign currency in their deposits. The real estate market, after booming for many years in succession, is now experiencing a sharp slowdown.

**Figure 5. – Real GDP-growth in the Baltics (yoy, %)**




*Source: Statistical offices*

The markets' mood towards Romania has changed substantially in the last year. While growth prospects remain positive, the country is paying the cost of its long-term vulnerabilities. The exchange rate has been very weak during the last months, and remains quite volatile. The Central Bank has opted for high interest rates as a strategy to maintain Romanian assets attractive and control inflation. In Bulgaria, markets are starting to price a higher cost of risk for the country, considering its high current account deficit and rising inflationary pressures. The currency (pegged to EUR through a currency board agreement) is not able to adjust coherently with the needed adjustment in the external imbalance. In Croatia, the Central Bank's strategy of cooling domestic credit growth, while limiting local banks' external indebtedness and forcing their recapitalisation has proved rather successful. Foreign debt increased by almost 30% of GDP since 2001. Domestic lending is being squeezed, constrained by fixed targets (through administrative restrictions which limits credit growth at a yearly rate of 12%), while the economic impact of such tightening is smoothed by the increasing relevance of cross-border lending (corporations financed from abroad), which already represent half of total corporate loans.

In the Western Balkans, the political scenario is still a source of risks. In Serbia, the political environment remained uncertain for a while, before and after the May elections. The consequences of Kosovo's unilateral declaration of independence and the effects on the economy are still not clear. Though gradually easing, continued high external imbalances might pose an additional threat in the context of a deteriorating global environment. In Bosnia-Herzegovina the domestic political environment is also crucial: the SAA (Stabilization and Association Agreement) with the EU represents a major support for the country, but weaknesses in the political sphere remain.

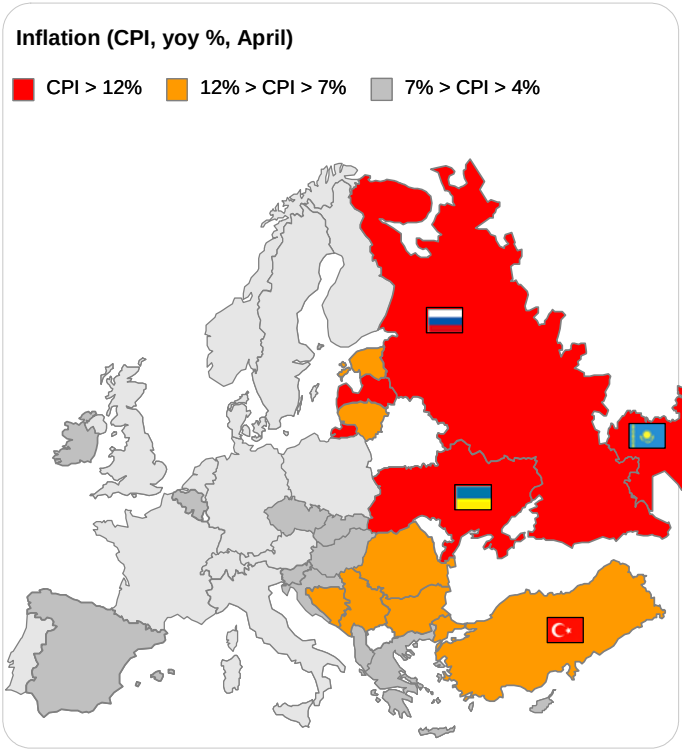
## Broader Europe: Inflation is the main issue

Countries in the rest of Central and Eastern Europe – CIS members and Turkey - are even more sensitive to the international re-pricing of risk, but they are continuing to show very high economic growth. Inflation is one of the main threats for macroeconomic stability.

In Russia, both banks and medium and large Russian companies relied heavily on external funding in recent years. The main evidence so far relates to a deceleration in corporate deposit growth and hikes in corporate credit growth; both are signs of reduced access by the corporate sector to direct external funding. So far a relevant slowdown in domestic lending has not materialized. The banking sector in general remains liquid and banks like Sberbank, VTB or the smaller foreign-owned banks continue to have wide access to international financial markets. Big companies could have access to international markets as well. Russia's ample fiscal and international reserves, high commodity prices and the stable political environment represent a relevant protection for the country's macroeconomic soundness.

Ukraine and Turkey are sub-investment grade (in terms of ratings) and they both suffer from the uncertain political landscape. The Turkish economy slowed down significantly during 2007, which was a very eventful year, dominated by both local elections and global uncertainties. In 2008 the main fragility is related, once again, to the perilous political environment: the ruling AKP party, which obtained a very large popular support in 2007 elections, is challenged by the secular establishment, which includes the judiciary power, the army and academics. The AKP party is currently under the threat of a ban from the Constitutional Court (at the time of writing a decision has not been taken yet). The Turkish economy is also very sensitive to the international environment: Turkey – as an emerging and "high beta" country – still remains exposed to financial contagion stemming from abroad more than other CEE countries. The Turkish assets are very liquid: any sharp weakening on the currency due to a change in investors' sentiment translates into higher inflation; changes in interest rates are often associated with an investment slowdown. However, the banking sector is less vulnerable than in other countries: balanced position in terms of FX risk and limited dependency on international borrowing are supportive. The Loans/Deposit ratio is still below 1, not a common trait in CEE countries. Moreover, the restructuring of the financial sector following the 2001 crisis attracted a lot of foreign investors in recent years and the sector is now much more open than a few years ago: in a relatively short time period the presence of foreign players reached almost one third in the market (in terms of assets, from less than 5% in 2002).

**Figure 6. – Inflation in „Broader Europe"**




More serious concerns arise for Kazakhstan, especially in the short term, with medium- to long-term potential preserved. A liquidity crisis translated into a credit squeeze. Country risk deteriorated from Russia's level (in terms of Credit Default swaps, between 50 and 100 bps) to that of Ukraine and Turkey (around 250 bps). Kazakhstan's ratings are "investment grade", according to the major three rating agencies. The consumption and investment boom which were the main factors behind the impressive growth of recent years is severely constrained. Companies now have reduced access to international debt markets, while the banking sector, which was fuelling a credit boom through external borrowing, has to severely limit credit expansion to its deposits' attraction capacity. The construction industry, which was one of the most dynamic sectors of recent years, is now overheating and cooling is likely to further impact on banking sector performance. The growth rate of the economy in 2008 will probably be half than the rate registered in 2007. However, with high energy and raw material prices the country has enough money and commitment to prevent a major crisis.

## Conclusion

A new international environment, with lower US and European growth, higher uncertainty and volatility and a general re-pricing of risk is testing the sustainability of the growth pattern of Central and Eastern European economies. Most countries were relying on external savings to finance economic growth and, in the context of a general re-pricing of risk, this might lead to some deceleration in credit expansion.

In CEE, the growth cycle has peaked in 2006–2007, but usual drivers still hold. Central Europe (Poland, Slovakia, Czech Republic, Hungary, Slovenia) is by far the least affected from the financial crisis. We have already seen some cyclical tightening in the wake of rising inflationary pressures and rising production capacity constraints. These countries can also suffer some possible negative impact from lower European growth.

Southeast Europe and the Baltics are more likely to feel the impact of a deteriorated international scenario and to face some deceleration in credit growth. Given the strong growth of the last years and overheating concerns, this, in some cases, works in line with central banks' aspirations, but only partially. The slowdown in the growth rate of Estonia and Latvia during the first part of 2008 has been very sharp. The future growth of the Western Balkans economies is sensibly linked with the political situation (especially in the case of Bosnia-Herzegovina and Serbia).

Other countries in the eastern part of the CEE region (Russia, Ukraine, Kazakhstan, Turkey) are very sensitive to the international re-pricing of risk. Russia is in a solid position, given high economic growth and high commodity prices. A liquidity crunch is visible and translating into a bank credit squeeze in Kazakhstan. Funding problems for banks might emerge (most probably affecting only a few relatively small players, with no systemic consequences) in both Russia and Ukraine. We believe, however, that financial resources and commitment are enough to preserve long term potential of the economy in Kazakhstan and to prevent major setbacks even in the short to medium term in the other two countries. Though remaining sensitive to capital market volatility, Turkey is relatively less likely to face any constraint to bank lending growth, but the political situation is again a source of risk.

Overall, we believe the CEE region as a whole can cope with the challenges of the new environment, but risks and costs are increasing. And the effects of the international crisis will not be homogeneous among the different countries and regions.

# Sustainability of Public Sector Imbalances – Evidence from Eastern Europe

- Aleksander Aristovnik (University of Ljubljana) -

## Introduction

Fiscal sustainability has recently drawn greater attention in former centrally planned economies. Indeed, practically all Central and Eastern Europe's emerging economies (i.e. transition economies) have experienced large deficits in fiscal balances since the start of the transition process.1 On one hand, the collapse of transition economies prompted governments to adopt an expansionary fiscal policy in the form of higher expenditures (to build up social and physical infrastructure) and to extend tax incentives to encourage investment. Moreover, fiscal deficits expanded as governments tried to absorb the revenue and expenditure pressure associated with both the sharp falls in GDP and fiscal restructuring. Consequently, a substantial increase in the public debt/GDP ratio has emerged in the region. Recently, a shift from Keynesian to more classical-oriented economic thinking and its conservative stance has also been noticed. Thus, significant demands that have also been supported by many international organizations (e.g. the IMF) and international credit agencies for balanced budget balances and even budget surpluses have emerged. Moreover, stable public finance is an explicit criterion for many transition economies' eligibility for the Economic and Monetary Union (EMU).2

The most common way of assessing a given economy's fiscal position is to analyze its fiscal sustainability, namely a 'sustainable' level of the fiscal imbalance that is consistent with solvency, i.e. one satisfies the criterion that the total public debt to GDP ratio should not increase. While the original literature on fiscal sustainability mostly focused on industrial countries (see Blanchard, 1990) these days there area few contributions, like this one, that focus on fiscal sustainability in transition countries (for some early attempts, see Buiter, 1996; Budina and van Wijnbergen, 1997; Green et al., 2000 etc.). Work closely related to ours includes Pasinetti (2000) and builds upon some previous similar attempts for transition countries (see Fanizza and Mourmouras, 1994) in the following important direction, i.e. an assessment of short-term, medium-term and long-term general government fiscal sustainability for fifteen transition countries from Central Eastern Europe (CEE) and South-Eastern Europe (SEE) based primarily on 2005 data and/or average data for the 2002-2005 period.

The paper is organized as follows. The next section briefly summarizes trends and the development of fiscal positions in transition economies. Section 3 introduces the concept of fiscal sustainability and discusses its key definitions and the main sustainability indicators proposed by the theoretical and empirical literature. The empirical framework and results of the estimations of selected indicators under a variety of assumptions are presented in Section 4. The final section provides concluding remarks and some policy implications.

[1] Unstable public finance undoubtedly had a significant role to play in the Czech and Russian financial crises in 1997 and 1998, respectively (McGettigan, 2000).

[2] Recently, an important step towards the Euro Area was taken by Estonia, Lithuania and Slovenia which joined the ERM II with effect from 28 June 2004 and later by Latvia and Slovakia with effect from 2 May 2005 and 28 November 2005, respectively (ECB, 2005). Nevertheless, only Slovenia managed to fulfill all Maastricht criteria (including both fiscal criteria) and joined the EMU in 2007.

## Fiscal imbalances in Eastern Europe

At the beginning of the transformation process fiscal policy played an important role in replacing the decline in private consumption which had appeared as a consequence of the collapse of output. Government expenditure in most transition economies in 1992 was significantly higher than in market economies with comparable levels of per capita GDP (in purchasing power parity terms), sometimes more than ten percentage points of GDP higher. Consequently, most transition economies implemented major fiscal reforms, some more successfully than others. In the early stage of the transition the need for major fiscal reforms was generally underestimated. The emphasis was more on the need for rapid privatization and 'getting the state out of the economy'; the need to reform state structures and the public administration in order to perform their very different but crucial roles in a market economy received less attention until a number of fiscal crises emerged (Economic Survey of Europe, 2000). Nevertheless, more recently practically all transition economies have admitted the need for totally new systems requiring not only new tax laws but also new fiscal institutions, new skills, technical knowledge and political capital.

**Table 1. Public balances in selected transition countries, 1992-2005 (in % of GDP)**

| | 1992–1997 (averages) | 1998–2001 (averages) | 2002–2005 (averages) | 1992–2005 (averages) |
|---|---|---|---|---|
| Czech R. | 0.5 | -1.9 | -4.9 | -1.8 |
| Estonia | -0.1 | -1.3 | 1.7 | 0.1 |
| Hungary | -3.5 | -4.3 | -7.1 | -4.8 |
| Latvia | -1.0 | -2.2 | -1.3 | -1.4 |
| Lithuania | -4.1 | -4.7 | -1.5 | -3.5 |
| Poland | -2.9 | -2.6 | -4.5 | -3.3 |
| Slovakia | -4.1 | -3.2 | -4.3 | -3.9 |
| Slovenia | 0.2 | -1.0 | -1.9 | -0.8 |
| *CEE* | *-1.8* | *-2.6* | *-3.0* | *-2.4* |
| Albania | -14.4 | -10.2 | -5.3 | -10.6 |
| Bulgaria | -1.7 | -0.5 | 0.8 | -2.9 |
| Bosnia and Herzegovina | -6.9 | -5.4 | -1.1 | -2.8 |
| Croatia | -1.6 | -5.3 | -4.8 | -3.6 |
| Macedonia | -4.8 | -1.8 | -1.6 | -3.0 |
| Romania | -3.4 | -4.1 | -1.9 | -3.2 |
| Serbia (and Montenegro) | n. a. | -1.1 | -2.6 | -2.0 |
| *SEE* | *-5.9* | *-4.0* | *-2.4* | *-4.0* |
| | | | | |
| *Total* | *-3.4* | *-3.3* | *-2.7* | *-3.1* |

*Note: n.a. – not available.*
*Sources: IMF (2007), author's calculations.*

Within the transition process economic reforms have taken place with damaging impacts on existing public finances. First, this occurred via the destruction of central plans and the elimination of information on quantities of goods produced and their prices. Consequently, the government had to rely on other sources, including taxpayers' declarations that increased tax evasion. Second, the reforms dramatically increased the number of producers and thus of potential taxpayers. In fact, the large state enterprises which once provided the bulk of tax revenue began to be replaced by new, small and difficult-to-tax private producers. Since a tax culture never developed in the centrally planned economies, people reacted with hostility to the introduction of an explicit tax system. Finally, the economic reforms removed the restrictions on payment methods that had existed under

central planning when all payments were channeled through the central bank. Accordingly, tax arrears and payments in the form of bartering have grown, creating major difficulties for the new system (Tanzi, 1999).

The patterns in public revenues and expenditure reflect both local factors and the mixed advice transition economies received from Western economies and institutions such as the IMF and the WB. An analysis of the fiscal data of transition economies yields several stylized facts. Most importantly, almost all transition economies went through a dramatic fiscal adjustment. In fact, the turnaround in fiscal imbalances has been especially remarkable for SEE economies which reduced their average deficits from an average of 5.9 percent of GDP in the 1992-1997 period to a moderate fiscal deficit of 2.4 percent of GDP in the 2002-2005 period (see Table 1). This fiscal adjustment in SEE is in particular the outcome of a major revenue shock at the start of the transition. Contrary to the SEE fiscal imbalance trends, CEE economies started with much lower average fiscal deficits, averaging out at 1.8 percent of GDP in 1992-1997 and even deteriorating to an average 3.0 percent of GDP in 2002-2005, generally as a result of maintaining relatively high government expenditure shares and a moderate decline of government revenues in the period (e.g. in the Czech Republic and Poland by more than ten structural points in the 1992-2005 period; see also Table 1). An important measure to deal with the revenue shortfall was the adoption of value-added tax (VAT). The rate initially adopted has generally been reduced and in most CEE states VAT now provides about the same proportion of total fiscal revenue as in most Western European states (i.e. 15 to 25 percent). Moreover, a number of CEE and SEE economies have introduced, or are in the process of introducing radical fiscal reforms (such as pension reform, health-care reform, etc.).[1]

As mentioned above, the recent worsening budgetary performance of CEE economies marks a departure from the pattern of most SEE economies. However, in some CEE economies (e.g. Estonia – increasing government revenues, and Lithuania – declining government expenditures) a relatively significant improvement in the fiscal balance has been seen in recent years. While most CEE economies are clustered in a narrow band there are extremes, for example Hungary's overall budget in 2005 posted the highest deficit among all considered transition economies of 7.8 percent of GDP while Estonia posted a surplus of 2.3 percent of GDP. Nevertheless, when one looks at the change in primary balances CEE economies generally maintained the average balance of their primary budget while SEE economies drastically reduced their large deficits in the 1992-2005 period since interest expenditure was growing in the same period. However, despite the declining share of expenditure in GDP, real public expenditure has been rising in many transition economies due to the relatively high GDP growth. Therefore, the fiscal reform process in the region consists more of ensuring that the budget process continues to acquire the necessary instruments for increasing efficiency, in the course of which further control over expenditure is likely to provide savings. In addition, less government interventions in the market, further reductions of budget deficits and structural reform of public finance aiming at improving the quality and efficiency of government remain important targets of economic policy in most transition economies.

[1] Indeed, many CEE countries recently introduced radical pension reforms, such as Hungary (1998), Poland and Slovenia (1999), Latvia (2001), Estonia (2002) and Slovakia (2005) (ECB, 2006).

## Theoretical background and empirical methodology

To decide whether a country needs to reduce its debt requires assessing if a country suffers from a solvency problem. The intertemporal solvency criterion does however impose some limits on the behavior of the non-interest fiscal balance (i.e. the primary fiscal balance). Such a solvency constraint implies that the discounted value of primary fiscal balances should be at least equal to the initial government debt; if a government is initially running primary fiscal deficits and has a stock of foreign debt it needs to run primary fiscal surpluses over time to remain solvent. More specifically, as long as the discounted value of government debt is non-zero in the infinite limit, the public sector is solvent. This only means that the government cannot increase its debt faster than the real interest rate on this debt.

However, the theoretical criteria for government solvency are quite loose. Indeed, the IMF (2002) and Croce and Juan-Ramón (2003) suggest that solvency is only a necessary condition for sustainability because solvency could be achieved with very large and costly future adjustments. Therefore, a non-increasing government debt to GDP ratio is seen as a practical sufficient condition for sustainability, i.e. a government is likely to remain solvent as long as the ratio is not growing. So, we can define a policy stance as sustainable if a borrower is expected to be able to continue servicing its debt without an unrealistically large future correction to the balance of income and expenditure (IMF, 2002). Moreover, this criterion is related to the so-called fiscal primary gap, which is the difference between the actual fiscal primary balance and the primary balance required to stabilize the debt to GDP ratio. Simple accounting identity helps shed light on the fiscal sustainability issue. According to Hemming and Miranda (1991) and Roux (1993) the (short-term) budget constraint is represented as:

$$\Delta D_t / Y_t = (r_t - g_t) D_{t-1} / Y_t + B_t / Y_t + R_t / Y_t \qquad (1)$$

where Dt, Yt, Bt, Rt stand for total public debt, nominal GDP, nominal primary (negative) balance of the public sector (i.e. the gap between non-interest expenditure and total revenue) and a residual factor applicable to the public sector, respectively. In addition, rt represents the real interest rate applicable to the public sector and gt the real economic growth rate. Note that the first part of the right-hand area in equation (1) refers to the interest component of government expenditure ((rt - gt)/ Dt-1/Yt)). Indeed, when rt > gt this indicates upward pressure on the debt/GDP ratio, while rt < gt indicates downward pressure. On the other hand, the remaining part of the right-hand area indicates the non-interest flows of government. If it is negative, the government is running a primary surplus, implying downward pressure on the debt/GDP ratio. If it is positive, the government is running a primary deficit, putting upward pressure on the debt/GDP ratio. Depending on the magnitude and signs of both right-hand parts there will be a net positive or negative effect on the debt/GDP ratio.

When assessing the fiscal sustainability issue, the main priority is to indicate whether a continuation of the present policy stance (as expressed in the present relationship between expenditure and revenue levels) would cause the debt/GDP ratio to explode, implode or remain stabile. Here, Bispham (1987) developed a set of equations that satisfies this need. If interest is paid and the primary deficit (b=Bt/Yt) is a constant ratio of GDP, the overall public deficit ratio is not constant. Hence, interest payments can cause the overall public deficit to change. What happened to the debt/GDP ratio depends on the relationship between the interest rate, r, and the economic growth rate, g, which can be presented as (if g > r):

$$D_t / Y_t = -b \left( \frac{1 + g}{g - r} \right) \qquad (2)$$

or as (if $r > g$):

$$D_t / Y_t = -b\left(\frac{1+g}{r-g}\right)\left(\frac{1+r}{1+g}\right)^t + b\left(\frac{1+g}{r-g}\right) + \left(\frac{1+r}{1+g}\right)^t D_0 / Y_0 \qquad (3)$$

When r > g the change in the debt/GDP ratio depends on the size and sign of the initial debt/GDP ratio and the primary balance. If there is initial public debt and primary deficit, the debt/GDP ratio explodes as t □ ∞ (fiscal policy is unsustainable). On the other hand, if government runs a primary surplus and has no initial debt (or have even initial net claims) then the government has an explosive net worth position. Although this situation is unlikely to appear in reality the fiscal policy will also be unsustainable. However, if we want to estimate the (un)sustainability position when the first and third right-hand terms operate in opposite directions, we have to determine if:

$$\left| -b\left(\frac{1+g}{r-g}\right) \right| > \left| D_0 / Y_0 \right| \qquad (4)$$

Thus, according to the presented equations, to establish (short-run) sustainability a government should run a primary surplus sufficient enough to cover the excess caused by the real interest rate over real growth rate, i.e. a sustainable primary surplus (Mourmouras, 1994), which can be presented as (Gonzalez-Paramo et al., 1992):

$$-B_t / Y_t = (r_t - g_t) D_{t-1} / Y_t \qquad (5)$$

Unsustainability is indicated as a position where the real interest rate, rt, exceeds the real economic growth, gt, and where the primary balance, Bt, is persistently either in deficit or in a surplus not large enough to cover the excess of the real interest rate over the real growth rate. In addition, Buiter (1985) suggested an alternative indicator of sustainability which depends on the difference between the actual primary surplus and the surplus that stabilizes the net government wealth (as a ratio to GDP). However, this indicator is hard to apply since a government's net worth is very difficult to measure.

On the other hand, in order to measure medium-term and long-term tax gaps (Blanchard, 1993) and the sustainable conventional public balance alternative indicators have been introduced. For example, a sustainable budget deficit (-GOVBt) is derived from equation (5) and equals the growth rate multiplied by the debt ratio:

$$-GOVB_t / Y_t = (r_t - g_t) D_{t-1} / Y_t - rD_{t-1} / Y_t = -gD_{t-1} / Y_t \qquad (6)$$

Moreover, because equation (6) ignores the relationship between the real interest rate and the real economic growth rate the conventional deficit is too crude a measure to use when analyzing the sustainability of fiscal policy. Therefore, the medium-term tax gap (t*n – t) can be taken as an alternative, where the real interest rate, real economic growth rate and projected path of no-interest expenditure are taken as given. In this respect, the required tax rate necessary to stabilize the debt/GDP ratio is as follows (Blanchard, 1993):

$$t_t^* = \sum (\exp + trf) / n + (r - g) D_0 / Y_0 \qquad (7)$$

where exp, trf and n stand for government expenditure, transfers (both as a ratio to GDP), and the numbers of years over which govexp and trf are incurred, respectively. However, equation (7) holds if the values of n and (r – g) are not large. The long-run tax gap is similar to the medium-term tax gap. However, it is specified for a period of 30-40 years and allows for factors that change expenditure (e.g. demographics) (see Wickens, 1992).

Indeed, equations (2)-(7) provide a set of satisfied test indicators to determine the potential unsustainability of public finance given that the current (primary) public balance is maintained and that the interest rate and economic growth rate are on a stable (medium-run) path. Nevertheless, we should keep in mind that fiscal policy is only sustainable is the assumptions made about the variables hold. Therefore, caution must be exercised when setting the assumptions of the model.

## The empirical framework

### *Assumptions and Data*

First, we estimate public finance sustainability for 15 transition economies, i.e. the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia (CEE) and Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Romania and Serbia (SEE).[1] However, in order to calculate a sustainable level of their fiscal balances some assumptions must be made. Indeed, this exercise is, by its nature, quite sensitive to the various assumptions made about what is the steady state of the economies under consideration. Arbitrarily, the steady state for transition countries is considered to reflect the following historical values of the key variables:

- the equilibrium level of public debt (D/Y) is assumed to be for 2005 (for the short-term period) or the average of the 2002-2005 period (for the medium- and long-term period) (IMF data); alternatively, it is assumed for all sampled economies that governments are comfortable tolerating a debt ratio of 60 percent (D/Y*);
- the (nominal or real) interest rate (i or r) is the average of effective interest rates on public debt in 2005 (short-term) or in the 2002-2005 period (medium- and long-term) (IMF data);
- nominal (gn) and real growth projections (g) are the average over the 2002-2005 period (EBRD and IMF data) for the medium-term and the average over the 2000-2040 period (UN/ECE GDP growth projections) for the long-term period.

The empirical results are summarized in the next sub-section. First, the short- and medium-term sustainability of public finance is checked by applying the methodology suggested by Fanizza and Mourmouras (1994). The results for the selected transition countries, including the scenario dynamics of the public debt to GDP ratio in the five- and ten-years period, are reported in Tables 2 and 3. Second, the methodology of Wickens (1992) and Blanchard (1993) is applied to calculate long-term public balance sustainability levels for the transition countries. Empirical results are reported in Table 4.

[1] Due to data deficiencies Montenegro (new state, established June 3, 2006) was not included in the sample.

## Empirical results

In this subsection we apply equations (4)-(6) in order to assess fiscal sustainability in the CEE and SEE regions. First, we concentrate on the short-term sustainability of fifteen transition countries. In Table 2, the first three columns (1-3) show the relevant magnitudes (public debt/GDP ratio, nominal rate of growth, and nominal interest rate) for calculation of a sustainable level of the primary public balance. Thus, columns 4 and 5 show the computation of equation (2) as applied to each transition country. Each figure represents the maximum fiscal deficit each country can sustain. More precisely, it indicates the maximum hypothetical ratio between the fiscal deficit and GDP that each transition country can afford, while keeping a non-increasing public debt/GDP ratio. Columns 7 and 8 show the gap between the corresponding calculated (columns 4 and 5) and actual primary fiscal balance (column 6). Since each year's deficit increases the outstanding public debt, the higher is the (positive) gap between the actual fiscal deficit and the hypothetical fiscal deficit the higher the speed at which the public debt decreases.

Table 2 shows the results of fiscal sustainability based on equation (2). In 2005, the actual (short-term) sustainable fiscal levels seem to be higher than calculated one, if we consider actual public debt in the CEE countries. On the other hand, if we take into consideration the targeted public debt (i.e. 60 percent of GDP), then the calculated (permitted) average primary fiscal deficit is relatively higher and the gap between the actual and calculated deficit amounts to 2.4 percentage points on average.[1] However, this average covers the substantial differences between the countries. Thus, the short-term fiscal policy stances of the Czech Republic, Slovakia and Poland seem to be unsustainable. On the other hand, by far the most favorable position is that of Estonia. Indeed, Estonia is the only country of the CEE region with a budget surplus, i.e. 1.8 percent of GDP (in 2005). In the other transition region (SEE countries), only Croatia and Albania seem to have an excessive short-term primary fiscal deficit. Indeed, in 2004 the gaps between the actual and calculated primary fiscal balances are positive and high on the average level, indicating sustainable fiscal positions in the considered region.

However, the preceding employment of (short-term) fiscal sustainability indicator may give a distorted picture of the amount of adjustments that would reasonably be required for different reasons. Indeed, the calculated (primary) fiscal balances (as a GDP ratio) can be distorted by, for example, speeding up privatization receipts (if the privatized assets would have yielded a positive future net cash flow to the government) or by cutting back government capital formation (if the present discounted value of the future net cash flow to the government would be positive). In addition, Buiter (1985) pointed out two further weaknesses of the one-period primary gap indicator. The first emphasizes that the actual current primary fiscal balance could be affected by cyclical increases or reductions in public sector revenues and/or expenditures. The second states the current nominal interest rate and growth of nominal GDP may be unrepresentative of their respective long-term expected average values. Hence, the need for medium- and long-term perspectives emerges, which are adopted in the rest of this paper.

Hence, we gauged the medium-term fiscal sustainability of the same fifteen transition countries. Given the set assumptions presented in the previous subsection the primary public balance seems not to be medium-term sustainable for most countries of the CEE region (the exceptions are

[1] While many of the transition countries under consideration reported a public debt stock below the tolerating benchmark for EMU (60 percent of GDP), their sustainable public primary deficits could be even higher. In particular, this is valid for the Baltic states, Slovenia and Romania where the public debt to GDP ratio is well below the different transition regions' averages.

Estonia, Lithuania and Slovenia). Indeed, their calculated sustainable size as a percentage share of GDP is relatively small, fluctuating between 0.3 (Poland) and -1.1 (Slovakia) if we consider the actual public debt. The lowest sustainable primary fiscal balance, namely in Poland, can chiefly be explained by the fact that this economy has been projected to have one of the lowest average growth rates of real GDP (3.5 percent p.a. on average) and the highest levels of real effective interest rates among all CEE countries (4.1 percent). On the contrary, Slovakia is confronted with one of the lowest real effective interest rates (2.3 percent). However, similar to the short-term fiscal sustainability results, Estonia again shows the strongest sustainable fiscal position in the CEE region. Contrary to the CEE region, most of the SEE countries show a sustainable medium-term fiscal policy stance. The only exceptions are again Albania and Croatia. While Croatia has an excessive primary fiscal deficit primarily due to relatively moderate real GDP growth averages (4.4 percent on average), the highest real effective interest rate is the main reason for the unsustainable medium-term fiscal position in Albania (5.2 percent on average).

**Table 2. Short-term fiscal sustainability in CEE and SEE countries**

| Country | Public Debt (*D/Y*) (2005) (1) | Growth rate of nom. GDP ($g_n$) (2005) (2) | Nom. interest rate (*i*) (2005) (3) | Calculated (short-term) primary public balance ((i-$g_n$)/(1+$g_n$))*(D/Y) | | Actual primary public balance (-*b*) ( 2005) (6) | Diff. (Actual-Calculated) (actual public debt assumption) (7) | Diff. (Actual-Calculated) (targeted public debt assumption) (8) |
|---|---|---|---|---|---|---|---|---|
| | | | | Actual public debt assumpt. (4) | Targeted public debt assumpt. (60 % of GDP) (5) | | | |
| *CEE (average)* | *29.8* | *9.8* | *5.3* | *-0.6* | *-2.4* | *0.0* | *0.6* | *2.4* |
| Czech R. | 25.6 | 7.0 | 3.9 | -0.7 | -1.7 | -1.1 | -0.4 | 0.6 |
| Estonia | 4.6 | 14.6 | 5.5 | -0.4 | -4.8 | 1.8 | 2.2 | 6.6 |
| Hungary | 62.4 | 6.6 | 7.0 | 0.2 | 0.2 | 3.7 | 3.5 | 3.5 |
| Latvia | 13.2 | 17.0 | 5.4 | -1.3 | -5.9 | -0.6 | 0.7 | 5.3 |
| Lithuania | 18.7 | 13.4 | 4.9 | -1.4 | -4.5 | -0.5 | 0.9 | 4.0 |
| Poland | 47.7 | 6.1 | 5.8 | -0.1 | -0.2 | -1.3 | -1.2 | -1.1 |
| Slovakia | 36.8 | 8.5 | 4.6 | -1.3 | -2.2 | -2.0 | -0.7 | 0.2 |
| Slovenia | 29.0 | 5.4 | 5.0 | -0.1 | -0.2 | 0.1 | 0.2 | 0.3 |
| *SEE (average)* | *40.7* | *10.7* | *4.5* | *-2.3* | *-3.2* | *1.0* | *3.3* | *4.3* |
| Albania | 56.7 | 9.0 | 8.2 | -0.4 | -0.4 | -0.5 | -0.1 | -0.1 |
| Bulgaria | 31.9 | 9.3 | 4.4 | -1.4 | -2.7 | 4.0 | 5.4 | 6.7 |
| Bosnia and Herzeg. | 31.7 | 7.3 | 2.2 | -1.5 | -2.9 | 1.5 | 3.0 | 4.4 |
| Croatia | 44.3 | 7.5 | 5.5 | -0.8 | -1.1 | -1.8 | -1.0 | -0.7 |
| Macedonia | 40.2 | 4.5 | 2.7 | -0.7 | -1.0 | 1.2 | 1.9 | 2.2 |
| Romania | 18.9 | 16.1 | 5.5 | -1.7 | -5.5 | 0.3 | 2.0 | 5.8 |
| Serbia | 61.2 | 21.2 | 2.8 | -9.3 | -9.1 | 2.5 | 11.8 | 11.6 |

*Sources: IMF (2007), author's calculations.*

In addition to the above analysis, special attention is paid to the evolution of the debt to GDP ratio for periods of five and ten years. If we assume that a relatively high real GDP growth rate and the existing real interest rate (average 2002-05) is maintained, then only the CEE region as a whole faces an increase of the average public debt to GDP ratio. Indeed, the average public debt to GDP ratio is planned to increase from 29.8 percent of GDP to 33.7 percent of GDP after five years and to 37.7 percent of GDP after ten years in the CEE region. In fact, only Estonia, Lithuania and Slovenia are planning to have a lower public debt to GDP ratio after a 10-year period in the considered region under the set assumptions. On the other hand, keeping the primary balance ratios at their current levels, Hungary and Poland would face a rapid debt ratio increase, which might significantly exceed the Maastricht reference value over a projection period of ten years.1 In SEE region, the average public debt to GDP ratio is planned to decline from 44.4 percent of GDP to 39.5 and 36.0 percent of GDP after 5 and 10 years, respectively. There are only two countries where public debt is planned to rise under the set assumptions, i.e. Albania and Croatia. Indeed, in these circumstances most of SEE

[1] ECB (2006) set out, that Hungary needs immediate fiscal consolidation and prudent fiscal policy as well as strengthening incentives (e.g. reducing marginal tax rates) to increase employment rate in order to maintain stable public finance and to improve huge external imbalance. Similarly, to stabilize public finance, Poland needs primarily to loosen relatively high share of rigid public expenditure linked to social transfers and public employment.

countries expect to lower the public debt to GDP ratio significantly in the next decade, in particular Bulgaria and Serbia.

**Table 3. Medium-term fiscal sustainability in CEE and SEE countries**

| Country | Public Debt (*D/Y*) (2002-05 averages) | Growth rate of real GDP (*g*) (2002-05 averages) | Real effective interest rate (*r*) (2002-05 averages) | Calculated (medium-term) primary public balance ((r-g)/(1+g))*(D/Y) | | Actual primary public balance (*b*) ( 2002-05 averages) | Diff. (Actual - Calculat.) (actual public debt assumpt.) | Public debt (D/Y) after 5 years | Public debt (D/Y) after 10 years |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Actual public debt assumpt. | Targeted public debt assumpt. (60 % of GDP) | | | | |
| *CEE (average)* | *29.8* | *5.6* | *2.6* | *-0.6* | *-1.7* | *-1.3* | *-0.8* | *33.7* | *37.7* |
| Czech R. | 22.2 | 4.0 | 2.4 | -0.3 | -0.9 | -2.6 | -2.3 | 33.3 | 43.6 |
| Estonia | 5.2 | 8.4 | 1.5 | -0.3 | -3.8 | 1.9 | 2.2 | -4.5 | -11.5 |
| Hungary | 59.5 | 4.1 | 2.6 | -0.9 | -0.9 | -3.8 | -2.9 | 73.6 | 86.6 |
| Latvia | 13.9 | 8.1 | 3.3 | -0.6 | -2.7 | -0.8 | -0.2 | 14.7 | 15.4 |
| Lithuania | 20.4 | 8.0 | 3.8 | -0.8 | -2.3 | -0.6 | 0.2 | 19.5 | 18.8 |
| Poland | 46.7 | 3.5 | 4.1 | 0.3 | 0.4 | -2.7 | -2.9 | 61.6 | 76.9 |
| Slovakia | 41.6 | 5.2 | 2.3 | -1.1 | -1.6 | -1.7 | -0.6 | 44.4 | 46.9 |
| Slovenia | 29.1 | 3.6 | 1.1 | -0.7 | -1.5 | -0.3 | 0.5 | 26.9 | 25.0 |
| *SEE (average)* | *44.4* | *4.9* | *-1.6* | *-2.8* | *-3.7* | *-0.3* | *2.5* | *39.5* | *36.0* |
| Albania | 60.1 | 5.0 | 5.2 | 0.1 | 0.1 | -1.2 | -1.3 | 66.7 | 73.3 |
| Bulgaria | 44.3 | 5.2 | 0.4 | -2.0 | -2.7 | 2.7 | 4.7 | 22.8 | 5.9 |
| Bosnia and Herzeg. | 31.3 | 5.0 | 1.0 | -1.2 | -2.3 | -0.4 | 0.8 | 27.7 | 24.7 |
| Croatia | 43.0 | 4.5 | 2.1 | -1.0 | -1.4 | -2.9 | -1.9 | 51.9 | 59.9 |
| Macedonia | 39.7 | 3.0 | 1.3 | -0.6 | -0.9 | -0.2 | 0.5 | 37.4 | 35.3 |
| Romania | 22.7 | 5.7 | -9.4 | -3.2 | -8.6 | 0.2 | 3.4 | 16.4 | 11.6 |
| Serbia | 70.0 | 6.0 | -11.5 | -11.6 | -9.9 | -0.2 | 11.3 | 53.3 | 40.9 |

*Sources: IMF (2007), author's calculations.*

Finally, we briefly consider long-term fiscal sustainability in all three transition regions under consideration. Table 4, because of its similarity to Tables 2 and 3, does not need to be illustrated in detail. It refers to equation (6) which helps us reveal the long-term sustainability of public finance. The results indicate that practically all CEE countries (except Estonia) and the minority of SEE countries show unsustainable long-term public finance.1 The group of countries including Latvia, Lithuania, Slovenia (CEE) and Albania and Romania (SEE) face moderate sustainability problems with (negative) gaps between the actual and calculated fiscal balance of around 1.0 percentage points. However, the most substantial long-term fiscal problems might affect the Visegrad group countries (Hungary, the Czech Republic, Poland and Slovakia in the CEE region) and Croatia (in SEE region).2

[1] When taking into account the targeted public debt assumption (60 percent of GDP) the fiscal situation is slightly better in both of the regions since the great majority of countries have a public debt below the assumed one.

[2] Indeed, the Convergence Report (2004) states that, as regards the sustainability of fiscal developments, keeping the overall and primary balance ratios at the current levels would be insufficient to keep the public debt ratio below 60 percent of

In this respect, further fiscal consolidation is strongly required in these countries, as they all maintain deficits well above 3% of GDP, the Maastricht reference value. However, sufficiently ambitious consolidation is also required in the countries with fiscal deficits below the reference value in order to achieve lasting compliance with their respective long-term objectives, as required by the Stability and Growth Pact, and dealing with fiscal challenges stemming from demographic ageing.

**Table 4. Long-term fiscal sustainability in CEE and SEE countries**

| Country | Public debt (*D/Y*) (2002-05) averages) | Growth rate of real GDP (*g*) (2000-40 project.) | Calculated (long-term) public balance ((*g*(D/Y)*)) | | Actual public balance (2002-05 averages) | Diff. (Actual-Calculated) | |
|---|---|---|---|---|---|---|---|
| | | | Actual public debt assumption | Targeted public debt assumption (60 % of GDP) | | Actual public debt assumption | Targeted public debt assumption (60 % of GDP) |
| *CEE (average)* | *29.8* | *3.1* | *-0.9* | *-1.8* | *-3.3* | *-2.3* | *-1.4* |
| Czech R. | 22.2 | 2.4 | -0.5 | -1.4 | -5.0 | -4.5 | -3.6 |
| Estonia | 5.2 | 3.0 | -0.2 | -1.8 | 1.7 | 1.8 | 3.5 |
| Hungary | 59.5 | 2.6 | -1.5 | -1.6 | -7.6 | -6.1 | -6.1 |
| Latvia | 13.9 | 3.6 | -0.5 | -2.2 | -1.6 | -1.0 | 0.6 |
| Lithuania | 20.4 | 4.0 | -0.8 | -2.4 | -1.7 | -0.9 | 0.7 |
| Poland | 46.7 | 3.7 | -1.7 | -2.2 | -5.4 | -3.6 | -3.2 |
| Slovakia | 41.6 | 3.2 | -1.3 | -1.9 | -4.7 | -3.3 | -2.7 |
| Slovenia | 29.1 | 2.1 | -0.6 | -1.3 | -1.7 | -1.1 | -0.4 |
| *SEE (average)* | *44.4* | *5.1* | *-2.4* | *-3.1* | *-1.8* | *0.6* | *1.2* |
| Albania | 60.1 | 6.9 | -4.1 | -4.1 | -5.0 | -0.8 | -0.8 |
| Bosnia and Herzegovina | 44.3 | 6.2 | -2.7 | -3.7 | -1.2 | 1.5 | 2.5 |
| Bulgaria | 31.3 | 4.0 | -1.3 | -2.4 | 0.7 | 2.0 | 3.1 |
| Croatia | 43.0 | 3.9 | -1.7 | -2.3 | -5.0 | -3.3 | -2.7 |
| Macedonia | 39.7 | 5.5 | -2.2 | -3.3 | 0.2 | 2.4 | 3.5 |
| Romania | 22.7 | 3.9 | -0.9 | -2.3 | -1.7 | -0.8 | 0.7 |
| Serbia | 70.0 | 5.3 | -3.7 | -3.2 | -0.8 | 2.9 | 2.4 |

*Sources: IMF (2007), author's calculations.*

GDP in the medium to long term, which points to the need for further substantial consolidation. In this respect, a more efficient and employment-friendly tax/benefit system could strengthen work incentives and make a significant contribution to fiscal consolidation while promoting economic growth and real income convergence in the context of completing the process of a transition to a market economy.

## Conclusion

The sustainability of public finance has been an important issue for transition countries in the last fifteen years. By using mainstream (primary fiscal gap) theory (proposed by Buiter (1983) and Blanchard (1990)), the analysis for Eastern European countries ensures some degree of restrictiveness. Based on simple mainstream theory measures of fiscal sustainability, the results indicate that fiscal sustainability seems to be a problem in many transition countries, particularly in the Visegrad group countries (in the CEE region) and in Albania and Croatia (in SEE region). In this respect, it is vital for these economies (especially for the considered CEE) to consolidate their fiscal (balance and debt) positions in order to be able to join the EMU as soon as possible. Moreover, for the countries under consideration it is also very important to maintain relatively high economic growth rate as well as to secure more favorable interest rates on public debt in the near future in order to mitigate additional fiscal burdens of demographic ageing in the countries under consideration.

Because of the simplicity and restrictiveness of the presented indicators, at least three main caveats should be noted. First, all the indicators used in the analysis are sufficient (but not necessary) conditions for long-run sustainability. Indeed, it may be sub-optimal to prevent a country from smoothing its expenditure because this would lead to overshooting the fiscal ratio that corresponds to a long-run equilibrium. Second, most of the indicators require assumptions about macroeconomic variables (e.g. GDP growth, interest rates, primary balance etc.) which are implicitly assumed to be exogenous. However, most of the included variables tend to be endogenous and/or correlated with each other. Indeed, it is unrealistic to assume that changes in economic growth do not affect the primary surplus or vice verse. Finally, a great majority of factors (such as demographics, etc.) that characterize the situation in transition economies are not included in these indicators.

## References


Alam, A., Sundberg, M., (2002), *A Decade of Fiscal Transition*. Washington: World Bank, Policy Research Working Paper, No. 2835.

Bispham, J.A., (1987), *Rising public sector indebtedness: Some more unpleasant arithmetic*. In Boskin, M.J., Flemming, J.S. & Gorini, S. (eds.), (1987), Private saving and public debt, 40-71.

Blanchard, O., (1990), *Suggestions for a New Set of Fiscal Indicators*. Economics Department Working Paper 79. Paris: OECD.

Blanchard, O., (1993), *Suggestions for a new set of fiscal indicators*. In Verbon, H.A.A. & Van Winden, F.A.A.M. (eds). 1993. The political economy of government debt, 307:25.

Budina, N., van Wijnbergen, S., (1997), *Fiscal Policies in Eastern Europe*. Oxford Review of Economic Policy, Vol. 13 , No. 2.

Buiter, W., (1983), *Measurement of the Public Sector Deficit and its Implications for Policy Evaluation and Design*. In International Monetary Fund Staff Papers, 30, June 1983, pp. 306-49.

Buiter, W., (1985), *Guide to Public Sector Debt and Deficits*. Economic Policy: A European Forum 1: 13-79.

Buiter, W., (1996), *Aspects of fiscal performance in some transition economies under Fund-supported programmes*. Centre for Economic Policy Research, Discussion paper, no. 1535.

Croce, E., Juan-Ramon, H., (2003), *Assessing Sustainability: A Cross-Country Comparison*. IMF Working Paper 03/145. Washington, DC, United States: International Monetary Fund.

*Convergence Report.* 2004, 2005, 2006. European Central Bank: Frankfurt.

*Economic Survey of Europe 2000*. Geneva: UN Economic Commission for Europe, 2000.

Fanizza, D., Mourmouras, A., (1994), *Fiscal indicators.* Seminar on Fiscal Policy Management in Economies in Transition (Lecture No. 16) – 7-18 November. Washington D.C.: Fiscal Affairs Department and IMF Institute, International Monetary Fund.

Gonzalez-Paramo, J.M., Rolàn, J.M., Sebastian, M., (1992), *Issues on fiscal policy in Spain.* In Bank for International Settlements. 1992. Current issues in fiscal policy and their implications for the conduct of monetary policy: 189-220.

Green, C. J., Holmes, M. J., Kowalski, T., (2000), *Poland: A Successful Transition to Budget Sustainability?* Economic Research paper No. 00/5, Loughborough University.

Hemming, R., MacKenzie, G.A., (1991), Public *expenditure and sustainable fiscal policy*. In Chu, K. & Hemming, R., (1991), Public expenditure handbook: 7-13.

*International Financial Statistics,* (2007), Washington: IMF.

International Monetary Fund, (2002), *Assessing Sustainability*. Policy paper prepared by the Policy Review and Development Department, Washington: IMF.

McGettigan, D., (2000), *Current Account and External Sustainability in the Baltics, Russia, and Other Countries of the Former Soviet Union*. IMF Occasional Paper, No. 189.

Pasinetti, L. L., (1998), *The Myth (or Folly) of the 3% Deficits/GDP Maastricht "parameter*". Cambridge Journal of Economics, 22: 103-16.

Roux, A., (1993), *The public debt: A medium-term perspective*. The South African Journal of Economics, 61(4): 324-33.

Tanzi, V., (1999), *Transition and the Changing Role of Government.* Finance and Development, Washington: IMF, Vol. 36.

Wickens, M., (1992), *Fiscal Indicators*. Pretoria: Department of Finance, Unit of Fiscal Analysis and Policy planning.