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**Saving, Investment and Growth: Catching-up of Central and Eastern European Countries to the EU**

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## Abstract

The Central and Eastern European candidates (CEECs) for EU membership are striving to achieve and sustain above EU-average growth rates that is one of the prerequisites of catching-up. This paper follows the empirical literature investigating the relationship between saving, investment and growth, and the main determinants of savings. A special emphasis is being put to identify the role of savings and investments in economic growth and scrutinize the ways how national government and EU policy as well as other non-policy factors can affect domestic saving rates. In the process of transition to a market economy a transition in savings can also be distinguished. In the CEECs it means a dramatic fall in the ratio of savings to GDP from artificially high levels during socialism. This is followed by the stabilization of this ratio at (or in some cases recovering to) more normal (equilibrium) rates that are comparable with those of other market economies at similar level of development.

By now, growth has been restored throughout the region and, with few exceptions, CEECs have achieved investment rates close to or well above EU-average. However, some of the less advanced CEECs still have rather low gross saving rates, well below both EU-average and their investment rates. Large current account deficits evolving in these countries also reflect this trend. The gap between national savings and investments has been increasingly filled by foreign capital inflows (foreign savings), mainly in the form of FDI. However, high sensitivity to worsening investor sentiments can only be reduced by increasing macroeconomic stability and lifting national savings more close to investments.

In the early phase of transition there was a shift in the composition of savings from savings by enterprises and the government to savings by households. Much of the recent improvement in gross national saving (GNS), however, has been the result of better profitability and hence higher savings of the corporate sector. All CEECs still cope with general government deficits that may have a crowding out effect on private investments. To control the growth of expenditures reforms of the social security system cannot be avoided. However, due to high transition costs, pension reform is not likely to result in a noticeable increase in GNS, at least in the short to medium run. Ongoing financial reform, although has high fiscal costs, is necessary for sustaining economic stability and it can enhance the spectrum of saving instruments. Increasing public saving can be the most direct and efficient way for the governments to lift GNS, however, CEECs have very limited room for maneuvering. In addition to high costs related to economic reforms and restructuring, accession to the EU requires substantial further resources to spend. CEECs, depending on the generosity of EU support, are to accommodate most of these considerable costs. To sustain growth and global competitiveness in the long run, beside investment in physical capital, CEECs should not neglect the importance of investment in human capital and knowledge (R&D), the

key growth factors of our age. Saving should constitute an element of a broad and coherent economic strategy. The most certain way of lifting national saving rates of the CEECs seems to be via growth.

## Foreword

*by János Gács*

This paper is one of the results of a broad, multi-year research project of the Economic Transition and Integration Project of IIASA entitled “Catching Up and EU Accession – Prospects for First and Second Wave Countries”. The research was particularly encouraged by IIASA’s Swedish and Hungarian national member organizations, while financial support was provided by the (then) Swedish national member organization, the Swedish Council for Planning and Coordination of Research (FRN). Preparations for the project started in 1999. In addition to other forms of communication two workshops, one in Budapest in January 2000, and one in Stockholm in May 2001, helped to elaborate the research agenda, coordinate collaborative work and discuss results. Publication of the studies prepared in the framework of this projects started in September 2001.

The main ideas of the research project can be summarized as follows.

The accession of the Central and East European countries (CEECs) to the EU is likely to lead to conflicts between these countries and the incumbent members unless there is a rapid narrowing of the gap in per capita incomes between them. The CEECs are much poorer and have proportionately much larger agricultural sectors than the average EU country, and their combined populations make up between one-fourth and one-third of that of the current EU. Due to these characteristics there is concern in EU member states about a mass migration from the East following accession, about social and environmental “dumping” from CEECs, and about an increased demand by the CEECs on the EU’s Structural and Cohesion Funds, as well as on the funds provided under the Common Agricultural Policy.

These concerns, however, are counterbalanced to a large degree by a “catching up” predicted by both theory and experience: poorer countries, unless their development is impeded by institutional barriers, usually develop faster than richer ones, and there is a tendency toward convergence in levels of GDP per capita. In recent years, this catching up process seems to have started. In addition, trends in capital inflows and stock market developments suggest that the expected return on capital in the region is sufficiently high to support the buildup of stronger production capacities.

The research project on catching up studied the pattern according to which preparations for membership can trigger changes that will affect the growth process before and after membership. Special attention was paid to CEECs in different positions: those that started negotiations in 1998 and may reach membership first, and those that started negotiations in 2000. The effects on the sources of growth in both the pre-accession and post-accession periods were studied.

The following specific topics were investigated by the contributors of the project: the relevance of the export led East Asian development experience for CEECs; the forces of convergence and divergence that worked in the less developed EU member states (Spain, Portugal, Ireland and Greece) following their accession; the mixed experience of East Germany in catching up in a growth theoretic perspective; the role of domestic savings and savings behavior in the catch-up process; the likely pattern of the so-called Balassa-Samuelson process (real appreciation associated with the expected rapid productivity growth) in the course of the convergence; evaluation of the possible effects of EU structural aid on the candidate countries' development based on the experience of the cohesion countries of the EU; financial convergence of the candidate countries to the EU and the growth process; the role of institutions in the process of transition and catching up; and the relationship between the growth process and human development (health, education, standard of living, including inequality) in the context of EU accession.

## **About the Author**

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# **Saving, Investment and Growth: Catching-up of Central and Eastern European Countries to the EU**

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## **1. Introduction<sup>1</sup>**

By the end of the past century 10 Central and Eastern European countries (CEECs) (the Czech Republic, Estonia, Hungary, Poland and Slovenia in 1998, Bulgaria, Latvia, Lithuania, Romania and Slovakia in 2000) have been invited to start negotiations for EU membership. At the dawn of the new millennium the Eastern enlargement of the EU seems to be one of the most significant challenges that both member and candidate countries face. This would make it possible to unify the two - over many years - artificially separated parts of Europe as well as to initiate a real Europe-wide integration, unknown until now as far as the number of participating countries and its deepness are concerned. Stability and strength of the forthcoming EU will largely depend on whether economic convergence can be achieved, otherwise widening differences may undermine the integration process itself. Thus it is of utmost importance to know how economic growth can be accelerated in the CEECs. The aim of my paper is to *identify the role of saving and investment in economic growth and catching-up* and to scrutinize in what ways national government and EU policy, as well as other non-policy factors can influence growth prospects.

## **2. Survey of relevant empirical literature**

### **2.1. Saving - Investment - Growth: ways of interrelation**

In this section I will summarize the results of a few comprehensive macroeconomic studies analyzing links between saving and investment, as well as growth. In 1998 a World Bank conference "Saving in the World" was held for which a lot of valuable papers were prepared based on the largest data set of aggregate saving measures and other statistics assembled to date covering some 150 countries over the post WWII period. Here I shall refer to some of them, first to those which analyze savings in a broader context, namely the correlation between savings and growth.

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<sup>1</sup> In the Figures and Tables the following abbreviations will be used: Cz = Czech Republic, Est = Estonia, Hu = Hungary, Pol = Poland, Se = Slovenia; all these are group 1998: (G-1998). Bu = Bulgaria, Lat = Latvia, Lit = Lithuania, Ro = Romania, Sa = Slovakia; all these are Group 2000: (G-2000). CEEC = all 10 candidate countries. The groups are used for statistical purposes only.



**Attanasio, Picci and Scorcu** (1999) analyzed both contemporaneous correlations and dynamic models and applied the concept of Granger causality to denote the fact that a variable is correlated with the lagged values of the other. They claimed that dynamic correlation can be quite different from the contemporaneous ones. Their main findings were as follows:

- (a) growth and saving seem to be mutually and positively related
- (b) lagged saving rates are positively related to current investment rates
- (c) also lagged investment positively Granger causes saving
- (d) growth positively Granger causes investment
- (e) but investment rates Granger-cause growth rates with a negative sign

The findings (a-d) can be explained without apparent difficulty. For instance, as supposed, higher growth may drive saving up, leading in turn to higher investment. Higher growth can enhance future growth expectations and returns to investment, thus, provided that saving is not a limiting factor, the accumulation of physical capital will finally take place. Although no exact mechanisms are known, if an increasing demand for capital goods stimulates saving, maybe through interest rate effects or development of the financial instruments that permits the mobilization of saving, savings may also adjust to investment. However, the most difficult finding of this paper to interpret seems to be the negative Granger-causation running from investment to growth rates. This result is quite surprising, and stands in sharp contrast to findings of several other papers and growth regressions.

Dani **Rodrik** in his recent paper "Saving Transition" (Rodrik, 1998) prepared as part of the World Bank research project on saving, reversed the course of the analysis and put as a starting point the actual growth performance of countries. He observed whether growth transitions preceded, ran parallel to, or followed the transition in saving. According to his definition *transition is a sustained increase in the saving (investment) rate or growth rate*, a shift by more than 5 percentage points of the national income, or 2.5 percentage points in the growth rate of real GNP, respectively. (For instance, he applied the following filter to the time series of saving rates for each country. A country is said to undergo a saving transition at year T if the three year moving average of its saving rate over a nine-year period starting at T exceeds by more than 5 percentage points the five year average of its saving rate prior to T. He excluded cases where the post-transition saving rate remained below 10 per cent as well as recipients of large resource windfalls.). The most important findings of his research are as follows:

- ◆ Countries that undergo growth transitions - due to improved terms of trade, increased domestic investment, and other reasons - often do end up with permanently higher saving rates.
- ◆ By contrast, countries that undergo saving transition do not necessarily experience sustained increases in their growth rates. With some exceptions, the typical pattern is that temporarily higher growth rates return to pre-transition levels within a decade.
- ◆ Based on his results he concludes: *focusing on saving performance only does not seem to be a profitable strategy* for understanding what makes for successful economic performance. Several examples demonstrate that the key to generating

virtuous cycles of high growth-high investment-high saving is to increase the profitability of enterprises, for instance, by enhancing production and investment incentives.

It seems worthwhile to look at his empirical findings more thoroughly. He identified only 20 cases for *savings transition* (the World Bank's database covers over 130 countries and a maximum of 35 years). The list includes many well-known cases, such as Korea, Taiwan, Singapore, Chile, China or Mauritius, but many surprises, as well (e.g. Egypt, Jordan, Syria, Pakistan, Philippines, Costa Rica, Panama, Belize etc.) The median saving rate in the sample goes from 14% in the five years before transition to 23% in the next five years and 25% in the five years thereafter. In this sample there were some spectacular reversals towards pre-transition levels, e.g. in Egypt, Philippines, Portugal etc. Looking at saving transitions and investment, the correlation seems particularly strong. Also saving transitions were usually associated with sharp increases in growth rates, but in many cases the increase in growth proved to be only temporary. There are some interesting cases where high and increasing saving rates did not coincide with high growth rates, but usually with parallel movement of the investment rates. Mauritius, Panama, Malta and some other countries can be good examples, at least for some period of time. It may indicate inadequate efficiency of investments and also suggests that *the increase in savings cannot be considered as a guarantee for acceleration of growth*. On the other side of the coin, 18 countries were selected as having undergone growth transitions. Among them there are 10 countries which had saving transition as well, however, the dates do not always coincide. (Actually, in 5 cases growth transition preceded savings transition). There are, however, further countries having undergone growth but no saving transitions, such as Bangladesh, Brazil, Dominica, Thailand etc. (Note: In Thailand saving rate also increased, but more gradually than it was given in the original definition.) It is quite surprising to see that saving performance, in almost two-thirds of cases, continued to improve even in years, when growth already slowed down. On the basis of Granger-causality tests run on pooled country data, Rodrik has found that *in the very short run* (using lags of a single year) *growth precedes saving*. (Note: He has also identified, however, that saving negatively Granger-causes growth).

**Loayza, López, Schmidt-Hebbel and Servén** (1998), based on the largest and most systematic collection to date of annual time-series on country saving and saving related variables, have drawn up the *main trends in the world* pointing also to differences between the highly developed and developing countries. Their main findings are as follows:

- ◆ The *world's average gross national saving rate has been declining* for the last three decades. The median saving rate fell from 21.1% in 1965-73 to 20.5% in 1974-84, and further to 18.7% in 1985-1994. (Incomplete data sets have made it not possible to extend the analysis further, however, the strengthened efforts of EU countries to meet the Maastricht criteria as well as several Latin American countries pursuing macroeconomic stabilization policies suggest that there may have been a break in the trend in the second half of the 1990s.)
- ◆ Saving rates show *large international dispersion* mainly due to different and even diverging saving patterns within the developing world. Saving rates rose sharply in China and the nine other so-called take-off countries (e.g. Hong

Kong, Indonesia, South-Korea, Malaysia, Singapore, Taiwan, Thailand, Mauritius and Chile), while in other developing countries and regions stagnated and even declined over the last three decades. On the other hand, the median saving rate in the industrial countries decreased from its historical peak of 27.5% in 1972-73 to 19% in 1992-93. Low saving countries tend to have higher saving volatility, as well.

- ◆ The median *public saving rate* in the developing countries fell sharply till the early 1980s. Since then, however, fiscal adjustment has proved successful in raising rates back to (or over) previous peaks. Industrial countries' median public saving rate declined significantly from the mid 1970s to reach negative levels in the early 1990s.
- ◆ Median *private saving rate* has declined in developing countries but has remained roughly constant in the industrial countries since 1973, although with large differences across countries.
- ◆ The median world gross domestic *investment ratio to GDP*<sup>2</sup> declined from 26% in 1972-73 to 22% in 1992-93, a trend observed in industrial and developing countries alike, however, the latter group exhibited a temporary investment boom during 1974-82. On the contrary, in the take-off countries and China investment rates increased sharply.
- ◆ The *correlation* between *national saving* and *domestic investment rates* is positive and significant. Also *investment rates* and *real per capita growth rates* are positively correlated. Based on a sub-sample of countries, the *household and corporate saving offsetting* is high.

**Loayza, Schmidt-Hebbel and Servén** (Loayza et al. II, 1998) based on the results of the same empirical analysis mentioned above, have tried to identify the main policy and non-policy determinants of saving. Some of their main findings are as follows:

- ◆ Estimates show that an increase in external saving (on the other side of the coin, a worsening of the current account deficit) is partly *offset* by a decline of private savings. The offset (or crowding out) coefficient is in the order of 30% in the short run, and about 56% in the long run. This highlights the common view that *foreign saving* not only complements but to a considerable extent *substitutes domestic private saving*. (See also Bayoumi et al., 1995)
- ◆ The short-term (within one year) response of private saving to any contemporaneous policy change is magnified (by approximately 2.3 times) in the long run.
- ◆ Policy changes causing a *permanent* increase in private income will be almost fully reflected in increased consumption, while the same policy, if only *temporary*, has a significant effect on saving.

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<sup>2</sup> Gross domestic investments are gross national investments corrected with the balance on the current account.

- ◆ *Public-sector saving is the most direct tool available for policy makers* targeting the level of national saving, because private saving offsets only part of any increase in public saving.
- ◆ Macroeconomic uncertainty - proxied by the *inflation* rate - has a positive effect on private saving rates due to precautionary motives. However, stabilization also affects savings through other indirect channels (e.g. growth, fiscal adjustment) as well, that are likely to more than compensate for any direct effect of inflation.
- ◆ *Financial liberalization* shows a robust negative direct effect on both private and national savings (usually by raising real interest rates and relaxing borrowing constraints, since both are negatively correlated with private savings), however, financial reform has a positive impact on growth, and through this channel, a potentially important indirect effect on saving.
- ◆ Both *income levels and growth rates* affect positively the saving rates, however, the effect of the level of development tapers off at medium or high levels of per capita income.
- ◆ Policies that spur development are an indirect but most effective way to raise saving. To the extent increased saving is *channeled into productive domestic investment*, successful growth policies may be able to set in motion a *virtuous cycle of saving, capital accumulation, and growth*.

## 2.2. Identification of saving determinants

In this section one can find a review of the results of some papers striving to identify the *determinants of saving*. Here I collect the pros (+) and cons (−) as for each possible determinant and refer to the sources. The signs applied throughout this section mean: (+) positive effect; (−) negative effect; (∅) no statistically significant relationship; (?) the relationship is not obvious and there are different results depending on the measures of saving and/or samples;

### Determinants of gross national saving

(→ and private saving)

#### 1. *Income levels*

(+) a) Loayza et al.: Significant and positive cross-country correlation with real per capita income levels. The correlation is higher for developing countries. Saving-income relation seems to taper-off at high income levels.

#### 2. *Income growth*

(+) a) Rodrik: Income growth exerts a statistically significant positive effect on the saving rate. This effect operates entirely on private saving. He found that an increase in the growth rate of 1 per cent raises the saving rate of the following year by 0.2-0.3 percentage points of national income. (Note: based on a narrow sample of countries with saving transition).

(+) b) Loayza et al.: Saving rates and growth rates are positively correlated, and this correlation is higher for industrial than for developing countries. Their

regression suggests that an increase in growth by 2 percentage points per annum is associated with a 2.5 percentage-point increase in the national saving rate.

(+) c) Loayza et al. (II): → An increase in the growth rate of income by 1 percentage point raises private saving rate by almost 1 percentage point, as well.

### 3. **Public saving - partial crowding out**

(+) a) Rodrik: Public saving exerts a strong positive effect on aggregate saving. While public saving does crowd out private saving, the *crowding out* is far from complete. An increase in public saving of 1 percentage point of national income raises total national saving by 0.40-0.74 points. Mobilizing public saving seems to be one of the most potent ways of raising national saving.

(+) b) Loayza et al.: the correlation is positive and high. → There is only a partial offsetting of private and public savings, however, the correlation coefficients differ across countries and country groups.

(+) c) Loayza et al. (II): → An increase in the public saving ratio by 1 percentage point reduces the private saving rate by under one-third of a point in the short run and close to two-thirds of a point in the long run.

(+) d) Dayal-Gulati et al. → government saving crowds out private saving only partially (based on a sample of Southeast Asian and Latin American countries).

(+) e) Bayoumi et al. → the offset (averaging 60%) although large, is considerably below unity. Moreover, it depends on whether changes in the government fiscal position are due to government spending or tax changes.

(+) f) OECD (2000): The effect of lower government spending on growth depends on the composition and efficiency of the government expenditures, while the magnitude of crowding out depends on the ways how they are financed. (Note: Evaluating these effects the Ricardian equivalence should also be taken into account here).

### 4. **Share of social security spending in total public expenditure**

(?/∅) a) Loayza et al.: the correlation is not robust across different saving measures and samples. It is positive in industrial countries, but close to zero in developing economies.

### 5. **Taxation and social security transfers**

(?) a) Besley et al.: If the overall saving effect of *tax incentives* is positive, it is generally found to be small. There are potential long run benefits to developing particular sectors through tax incentives. This however, has less to do with the creation of new savings than portfolio shifts.

(-) b) → Tanzi et al.: The evidence of OECD countries shows that the shares in GDP of both total taxes and income taxes have a highly significant and strongly negative impact on *household saving rate*. The impact of consumption taxes is quantitatively less pronounced, but still statistically significant.

(-) c) → Callen et al.: Evidence from 21 OECD countries suggests that higher reliance on direct income taxes as opposed to indirect taxes appears to be

associated with lower *household saving*. Higher government transfers in the social security and welfare systems are also associated with lower saving.

(-) d) Dayal-Gulati et al. → social security expenditures are associated with lower private saving (based on a sample of Southeast Asian and Latin American countries).

(-) e) Ricardian equivalence

## 6. *Pay-as-you-go (PAYG) versus fully funded pension schemes, provident funds*

(?/+ ) a) Samwick: Countries that operate unfunded or PAYG social security systems tend to have lower saving rates, and this effect increases with the coverage rate of the system, although the statistical significance of the negative coefficients is weak. On the other hand, no country other than Chile that moved toward fully-funded systems experienced a significant increase in the trend of savings after the reform (incl. Switzerland, UK, Italy etc.). Due to the limited time period and the small number of countries that can be studied, yet no definitive conclusions can be drawn about a casual relationship between the type of pension system and the rate of saving.

(+/-) b) Dayal-Gulati et al.: Fully-funded pension schemes generally have a positive effect on private saving. However, where restrictions on withdrawals from these funds were eased, the effect on saving was found to be smaller or ambiguous (based on a sample of Southeast Asian and Latin American countries).

(?/+ ) c) Faruquee et al.: Compulsory provident fund saving appears to have had little or no consequence for the trend rate of saving in Malaysia, but there is some evidence of long-run impact in Singapore.

## 7. *Inflation*

(?) a) Loayza et al.: the correlation is not robust across different measures of saving and samples. It is usually negative but not significant, however, at the household level it turns positive.

(+) b) Loayza et al.(II): → Positive effect on private saving. Increased uncertainty induces people to save a larger fraction of their income due to precautionary motives.

## 8. *Financial reform/liberalization*

(-) a) Bandiera et al.: There is no firm evidence that financial liberalization will increase saving. On the contrary, the indications are that liberalization overall, and in particular those elements that relax liquidity constraints, have been associated with a fall in saving. There are neither positive nor significant interest rate effects. Thus, it would be unwise to rely on an increase in private savings as the channel through which financial liberalization can be expected to increase growth. (Based on the analysis of eight developing countries).

(?) b) Beck et al.: The long-run links between banking development and private savings are more tenuous. However, it has a causal impact on total factor productivity growth, which in turn feeds through to overall GDP growth.

(-/? ) c) Loayza et al.(II): Financial liberalization has not got any positive direct effects on saving, however, there is evidence that financial reform has a positive impact on growth, and through this channel, a potentially important indirect effect on saving. By relaxing borrowing constraints and lifting real interest rates, it may have a negative effect, though. At the same time it broadens the diversity of available saving instruments. (Supplementary note: Due to heterogeneous informational content of measured interest rates in the sample (i.e. both countries with liberalized financial markets and with administrative interest rate controls were incorporated) further empirical experiments are needed. Nevertheless, in no case did the authors find a positive and significant impact of the real interest rate on saving. As a result of financial liberalization real interest rates typically increase, the banking sector grows, the size of outstanding monetary and financial liabilities increases, and private sector credit flows expand.)

**9. *M2 money stock ratio to income***

(+) a) Loayza et al.: positive, and larger for industrial countries.

(∅) b) Loayza et al.(II): → but small and insignificant impact on private saving.

**10. *Private financial wealth***

(+) a) Loayza et al.: positive, significant and larger for industrial countries.

**11. *Real interest rates***

(-) a) Rodrik: negative and strong statistical relationship. Lagging the real deposit rate do not change the result. Saving transitions are usually associated with significant reductions in real deposit rates.

(?/-) b) Loayza et al.: the correlation is not robust across different measures of saving and samples. However, it is negative in industrial countries and the same for savings at household level.

(-/? ) c) Loayza et al.(II): → negative impact on private saving rate (i.e. income effect outweighs the sum of its substitution and human wealth effect).(See also notes\*)

(?) d) Ogaki et al.: → elasticity of saving to real interest rates is highly dependent on the level of development. Low income developing countries exhibit a negligible response as compared to middle and high income countries. But above a certain level, subsistence plays little role in the expenditure patterns of most households.

**12. *Stock of private credit***

(∅) a) Rodrik: no significant effect on saving

(∅) b) Loayza et al.: the correlation is not robust across different measures of saving and samples.

but (-) c) Loayza et al.(II): → relaxation of credit constraints leads to decreasing private saving (a 1 percentage point increase in the private credit flow to income ratio reduces the long-term private saving rate by 0.74 percentage points).

**13. *Aid flows from abroad***

(+) a) Rodrik: positive and significant relationship. About 50 cents of a dollar of aid end up as increased saving.

**14. *Foreign borrowing constraints***

(+) a) Loayza et al.(II.): → leads to an increase in private saving.

**15. *Workers' remittances***

(+) a) Rodrik: in a sub-sample of countries it was an important determinant of saving transitions. Some countries received remittances in excess of one per cent of GNP such as Egypt, Jordan, Pakistan, Portugal, Malta etc.

**16. *Trade (exports) to GNP ratio***

(-) a) Rodrik: → negative and significant relationship with private saving. The reason is unclear.

but (+/? ) b) Levine et al.: In their sensitivity analysis of cross-country growth regressions identified positive and robust correlation between growth and the share of investment in GDP, and between the investment share and the ratio of international trade to GDP.

**17. *Improving terms of trade***

(+) a) Rodrik: Positive and significant relationship and it is primarily private saving that is affected.

(∅) b) Loayza et al.: not significant

(+) c) Loayza et al.(II): positive effects. Permanent terms of trade windfalls are consumed almost in full, while *temporary windfalls* have a much larger effect on saving.

**18. *Urbanization***

(+) a) Rodrik: Positive and significant relationship and it is primarily private saving that is affected.

(?/∅) b) Loayza et al.: the correlation is not robust across different measures of saving and samples. At the world level it is positive, also for developing countries, but turns negative for industrial countries.

but (-) c) Loayza et al.(II): by lacking the means to diversify away the high uncertainty of their mostly agricultural income, rural residents tend to save a larger proportion of their income.

**19. *Dependency ratio*<sup>3</sup>**

(∅) a) Rodrik: no significant effect on saving in his sample.

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<sup>3</sup> The ratio of population above 65 (old age) or below 15 (young age) to the working age population (those aged 15-64).



(?/-) b) Loayza et al.: the correlation is not robust across different measures of saving and samples. For household saving, the correlation with old-age dependency ratio is systematically negative. The world cross-country correlation between saving and young-age dependency ratio is also negative.

but (-) c) Loayza et al.(II): → both young and old age dependency ratios have a significantly negative effect on private saving rate. The results are consistent with standard *life-cycle models of consumption*.(See also notes\*)

(-) d) Bayoumi et al.: The aging of the population will generate significant downward pressure on private saving rates in most industrial countries, however, in many developing countries, the increase in the old age dependency ratio may be offset by a decrease in the young age dependency ratio.

(-) e) Heller et al.: Aging can significantly reduce the private and national saving rates in the Tiger economies, particularly after 2025.

(-) f) Faruquee et al.: Shifts in the demographic structure of the population appear to be the main factor explaining the sustained rise in the rate of saving in Southeast Asian countries.

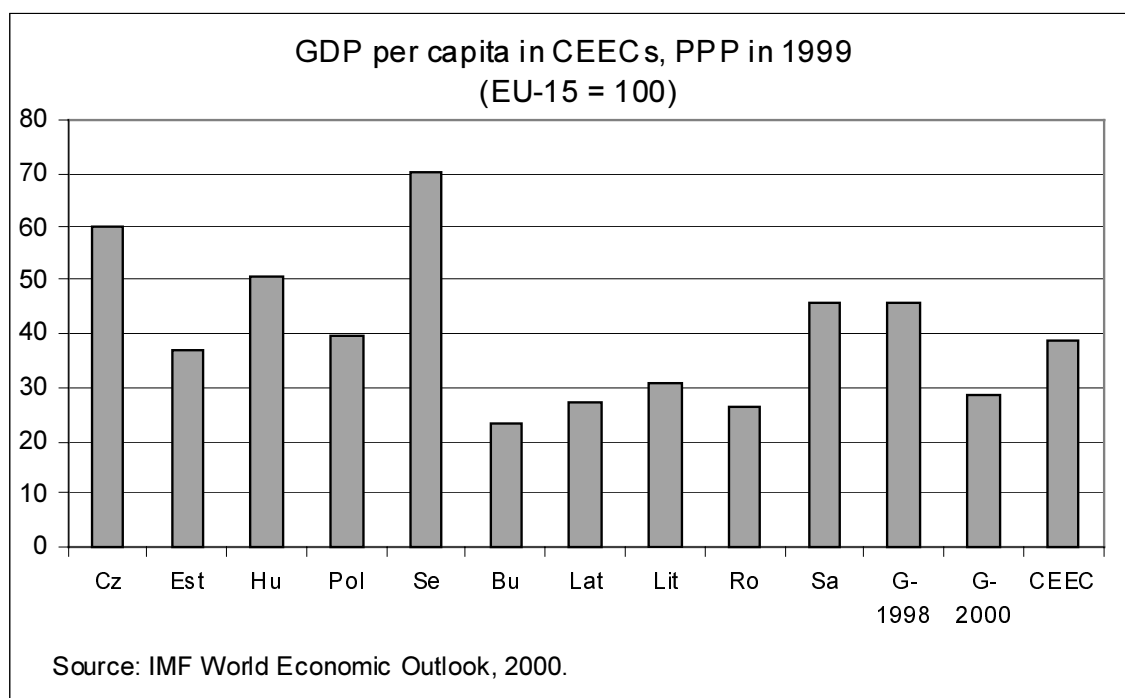
\*) Theoretical notes: In the *modern theories of consumption*, such as the *life cycle theory* (see e.g. F. Modigliani) and the *theory of permanent income* (see M. Friedman), the rate of growth is determined by demographic factors (e.g. the structure of the population) and the desire to smooth the consumption path over the entire life-span, which requires defining the lifetime income or the permanent income. These theories are mainly to explain consumption and saving patterns at the household level. The effects of real interest rates on household savings can also be explained with life cycle theories. Accordingly, an increase in real interest rates is supposed to exert effects on household consumption/saving through three channels: *income effect* used to induce higher consumption, while both *substitution* and *human wealth effects* generally lead to lower consumption. (For more details and overview of the literature see e.g. Liberda et al., 1999).

### **3. Catching-up and sustainable growth in Central and Eastern Europe**

CEECs are striving to achieve and sustain above EU-average growth rates to catch-up to EU income level. *Maintaining the trend of convergence following (and even before) Eastern enlargement would be a key factor behind successful economic and social integration*. As a starting point we should turn our attention to the recent income position of the Eastern candidates. In PPP terms, the 10 CEECs that applied for membership have *an average income level of only 39 per cent of the EU-15 average* (1999). However, individual countries differ widely according to the level of development. I should emphasize here that the grouping of countries (into Group 1998 and Group 2000) reflects the years when the CEECs were invited by the EU to start official negotiations (and hence more or less the initial level of their preparedness), but does not reflect their subsequent development nor the actual differences across countries in several fields. Applying this classification throughout this paper bears only of statistical significance and does not necessarily reflects an evaluation. Based on GDP

per capita, of the 10 CEECs by far Slovenia is heading the row (see Figure 1). By 1999 Slovenia reached an income level (70% of EU-15 average) surpassing by 2-3 percentage points the income position of Greece, the less developed of the present EU member countries. By the same time the Czech Republic reached 60%, Hungary 50%, Poland 40% and Estonia 37%. Of the countries which started negotiations in 2000, Slovakia had a level of per capita GDP 46% as compared to the EU-15. All other CEECs had an income level below one-third of the EU-15 average. At first sight the *Eastern enlargement of the EU seems unprecedented*, both as far as the number of candidates and their average level of development are concerned, however, the most advanced CEECs may be eligible for comparison with former less developed accession countries. When joined the EU Greece had a per capita income level 70% of the EU-15 (although that time the EU (EC) consisted of less countries than now and also the average income level was lower), Spain 72%, Ireland 62%, Portugal 53%. In many respects CEECs have developed beyond the level that the candidate countries in former enlargements reached before their accession, although the EU itself is developing continuously hence setting now much stricter (but not yet Maastricht) requirements against the newcomers to meet.

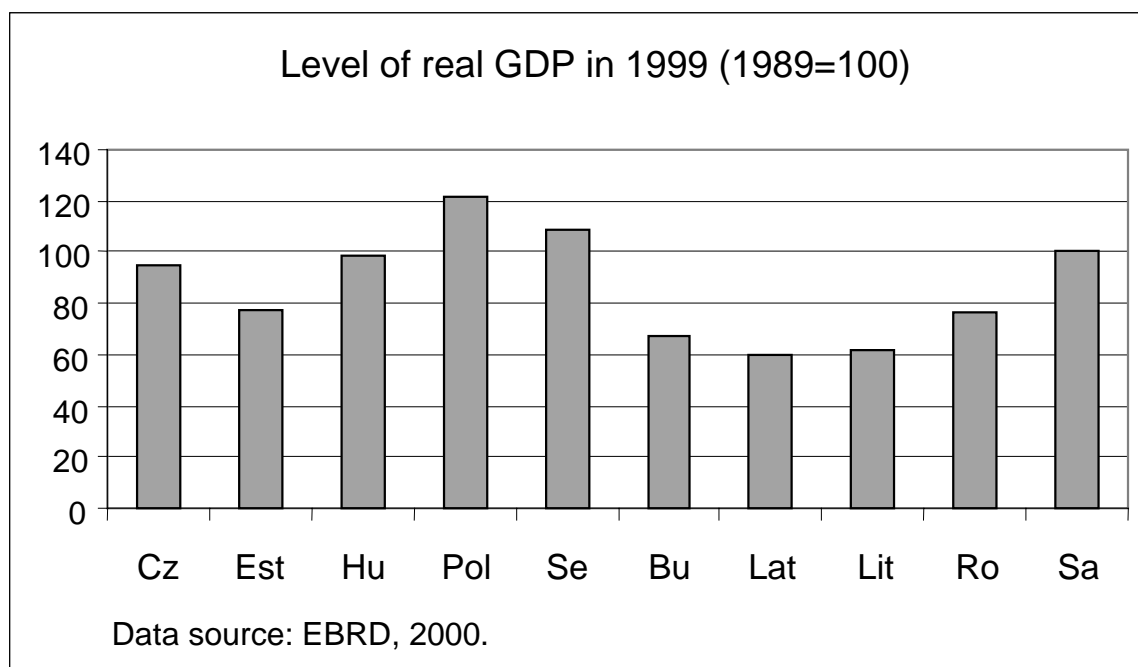
Figure 1



It should be emphasized, however, that *catching-up has not been a continuous trend* since CEECs stepped on the path of building a market economy. Right at the beginning, the first years of transition were characterized by a dramatic shrinkage in the economy. No CEEC escaped this collapse in output, however, countries differed considerably by the magnitude and length of time of contraction. Actually *we can speak about catching-up in most countries since the second half of the 1990s*, however, a general pattern can hardly be identified. From this point of view it may worth looking at

Figure 2 depicting *the level of GDP in 1999 as compared to what was registered ten years before*. By 1999 out of the CEECs only Poland, Slovenia and Slovakia have reached their pre-transition (1989) level of output, but Hungary and the Czech Republic have also approached this level. In the other CEECs either the fall of output was so dramatic or the recovery has been less pronounced that a decade has proved not enough to get out from the transition related hole.

Figure 2



### 3.1. Savings (in) transition: crises and challenges

In this section we can follow the trend how savings, investment and growth have developed in the CEECs since the late 1980s. Although transition to a market economy can be monitored from several points of view, here I will focus on the saving and investment patterns. Interestingly, *transition* itself can be defined in several ways, although the term is most widely used to describe the transformation of a country from centrally planned (socialist) economy to a fully-fledged (developed) market economy. Transition necessitates to complete far-reaching policy, economic and institutional reforms.

When one compares the development of the CEECs with other developing countries in East Asia, Latin-America or less developed present EU member countries, several *similarities* can be seen. *Almost all impediments that were in the way of economic development of these latter countries have also hindered growth in the CEECs*. If we take a glance at what kinds of crises other countries have gone through in the post war period we can see that the CEECs have also been forced to face most of them (e.g. oil crises of the 1970s, debt crisis of the 1980s, market crises of the early 1990s /recession in Western Europe, collapse of the CMEA/ etc.). We can continue with the *most recent challenges stemming from world-wide market liberalization,*

*globalization, and further integration in the EU* aiming at the Economic and Monetary Union. Countries that took part in former enlargements of the EU face these new challenges while already being part of the EU and may be with more time for preparation, while the CEECs are forced to make accelerated adjustments based mainly on their own efforts. *The Eastern candidates for EU membership with only one or less than one decade history of market economy development (disregarding now experiences before WWII) are to meet the same challenges that even the most developed countries find difficult to face.* Last, I can refer here to the most recent crises, the Asian and Russian ones, that affected emerging markets in Eastern and Central Europe more than the EU. These developments also render us some important lessons. *The deepness and quality of reforms (i.e. structural and institutional adjustment) are not less important than the speed.* Legal and institutional development should progress parallel to real development. Not all the suggestions by market economy experts work properly in the CEECs, the *special features and circumstances* of the transition countries should also be taken into account.

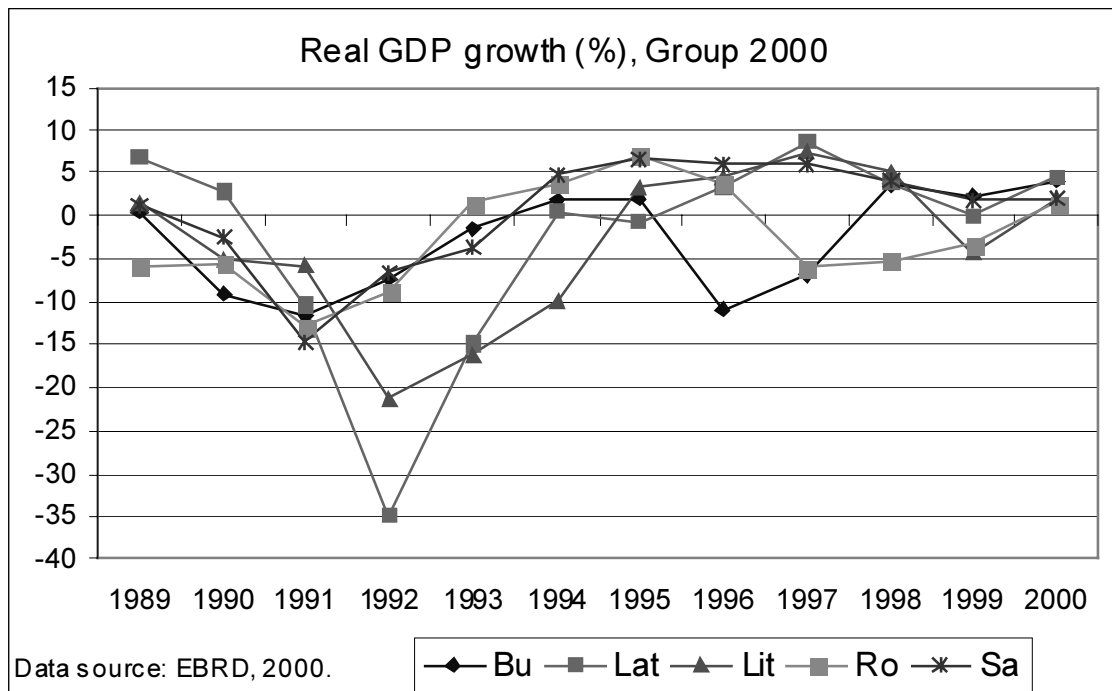
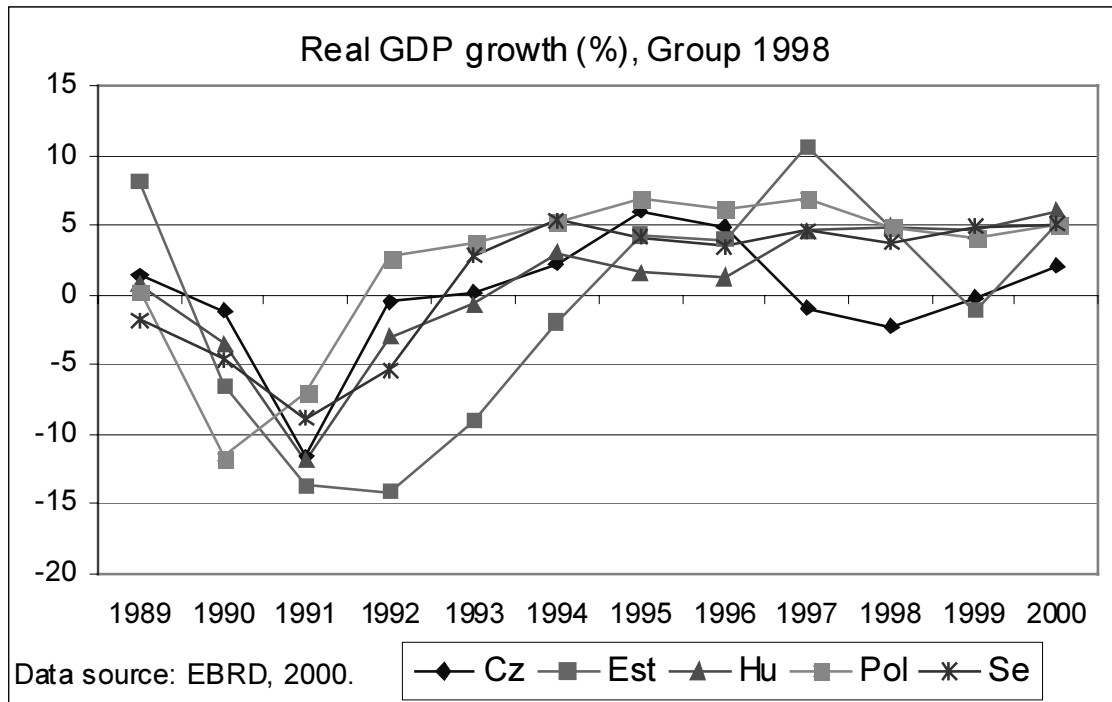
*Stages of the transition to the market economy* can be identified in several ways. The first stage (*early phase*) can be characterized by a demise of the former economic system, because some time the destruction is bigger than building (of new mechanisms, institutions, economy, etc.). In the *intermediate stage* stabilization is achieved, the economy is reaching stagnation, and gets on a growth track. In a third, more *advanced stage* (mature economy phase), economic recovery is sustained, based on real economic as well as institutional and policy development that, by the end, makes market mechanisms work in a similar way as in developed market economies. Certainly, there are several other classifications for the stages of development (some distinguish even more stages), the point is that *the transition is far from being a continuous trend* (sometimes there are setbacks, as well) and *several stages* can be identified during transition. From Figure 3 we can follow the growth trends in the CEECs.

Similarly to different phases of economic growth during transition to market economy, a *transition in savings* can also be distinguished. The term *saving transition* can be found in several papers (see e.g. Asilis-Ghosh, 1992; Rodrik, 1998), however, it is mostly used to describe the development of savings during takeoff periods and not applied for transition countries only. Actually, in the case of the CEECs it means *a dramatic fall in the savings ratio to GDP from artificially high levels during socialism before stabilizing it at (or in some cases recovering to) more normal rates that are comparable to those of other market economies.* Also the composition of savings does change. Although this trend is more or less typical, the CEECs show quite different patterns as far as the long-run rate of savings, the timing and the relationship with growth are concerned.

It should be noted here that although both the *availability and reliability of statistics* have improved considerably in the CEECs since the transition began, significant shortcomings have remained yet. This may be less valid for the main macroeconomic indicators and more for national accounts statistics from which our data on savings and investment ratios can be obtained. Sometimes there are large discrepancies between national statistics and figures of different international institutions. This emphasizes the importance that figures should still be treated with some caution, however, I think that the main trends that can be drawn up from these statistics are not basically affected by these shortcomings. Thus in the following

sections the main trends will be important to watch and not the precise year on year change suggested by statistics.

Figure 3



### **3.1.1. Forced savings and centrally-planned investments during socialism**

Savings and investments usually show parallel movement in the long run, and there is a strong (two-way) relationship between saving/investment and growth. But not in centrally planned economies, where market mechanisms (such as prices) are depressed and almost all factors are artificially controlled. (For a detailed overview of savings under central planning see e.g. EBRD, 1996; Denizer-Wolf, 1998; Kornai, 1992). *In the pre-transition phase centrally-planned economies had surprisingly high saving and investment rates (above 30-40%), significantly higher than developed market economies. These rates were comparable with those of the fast growing East Asian countries (which have by far the highest rates over the world), however, without similar impressive results in growth records. These high rates of savings and investments stemmed from the idea that centrally specified growth rates could be achieved by forced savings and directed capital accumulation. State budget played an outstanding role in the allocation (redistribution) of savings. Countries under central planning aimed at surpassing growth trends of market economies based mainly on extensive economic expansion with intensified use of physical capital, labor and natural resources, almost independently of their effectiveness and costs. Not quite surprisingly this forced economic development resulted in declining returns to investment and thus also in disappointing growth rates that became more obvious over time. Sluggish technological progress and poor efficiency in the allocation of resources can also be identified as factors behind the poor results.*

The composition of saving and investment in centrally planned economies was also rather different as compared to market economies, with *much emphasis on enterprise savings* and less on household savings. Up to the end of the 1980s general government sectors were more or less in balance. Due to artificially set input and output prices and a complex system of taxes and transfers, the enterprise sector had substantial surpluses that were redirected to fund planned investments. By contrary, low saving rate of households can be explained by several factors. First, under socialism employment was guaranteed and the state provided a generous "cradle to grave" social safety net. Under these circumstances there was little motive of precautionary savings for a rainy day or retirement. Second, there was only a limited range of saving instruments, mainly domestic and foreign currencies and deposits in state savings banks. Third, due to several forms of in-kind allowances, the level of monetization of households' income was rather low. Fourth, due to centralized wage settlements and controlled sales channels the consumption was also kept in hands.

All these factors notwithstanding, because of unavailability or shortage of several types of consumer goods (especially durables like TV set, car, refrigerator etc.) that characterized all these countries we can also speak about *involuntary or forced savings*. Denizer and Wolf (1998) have tried to assess the extent of involuntary savings by comparing the predicted (hypothetical) saving rates with the actual ones, taking into account characteristics of market economies with similar development levels and conditions. Their finding supports the presumption that *in most CEECs the actual saving rates were above predicted or equilibrium levels*. They explain this difference with wide-ranging quantity and price controls that made consumers unable to choose an optimal consumption path, resulting in disequilibrium savings. Last, we should add that the gap between actual and equilibrium levels of savings changed over time. Reform efforts of the 1970s and 1980s reduced somewhat the distortions, while strengthening

trade and financial links with Western market economies made the control of consumption by the authorities less effective.

### 3.1.2. In the early phase of transition to market economy: the collapse

As transition to the market economy began, bringing about far-reaching changes in the political and economic systems of the CEECs, very often in association with the radical elimination of administrative (price) controls, *savings declined sharply* in almost all of the transition countries. This fall in the saving ratio that ran parallel to the dramatic contraction in output and soaring inflation *may be interpreted as a necessary adjustment to eliminate the inherited disequilibrium*. However, we can see later on that the contraction of both in savings and general economic conditions proved so significant and long-lasting that *this development can only to some extent be considered to have been a sort of creative destruction*. On average it took four to five years, of course depending on countries, to reach the bottom in contraction. On Figure 3 we can see that the annual rate of fall in GDP in a few countries sometimes reached 10-35% in the early 1990s. At the same time price developments following the liberalization of prices led to two to four digit annual inflation rates in this period (see Figure 4 and Table 1).

Figure 4

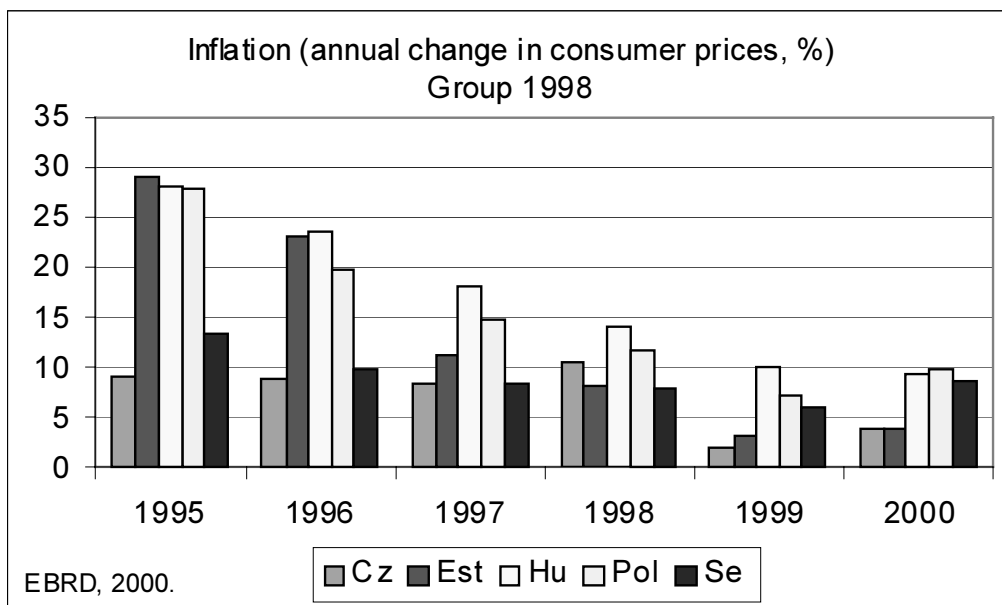


Table 1

**Inflation in the CEECs**  
(annual average percentage change in consumer prices)

<b>Group 1998</b>	<b>1989</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
<b>Czech Republic</b>	1.4	9.7	52	11.1	20.8	10	9.1	8.8	8.5	10.7	2.1	3.9
<b>Estonia</b>	6.1	23.1	211	1076	89.8	47.7	29	23.1	11.2	8.2	3.3	3.8
<b>Hungary</b>	17	28.9	35	23	22.5	18.8	28.2	23.6	18.3	14.3	10.1	9.5
<b>Poland</b>	251	586	70.3	43	35.3	32.2	27.8	19.9	14.9	11.8	7.3	9.9
<b>Slovenia</b>	1306	550	118	207	32.9	21	13.5	9.9	8.4	8	6.1	8.6
<b>Group 2000</b>	<b>1989</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
<b>Bulgaria</b>	6.4	26.3	334	82	73	96.3	62	123	1082	22.2	0.7	7
<b>Latvia</b>	4.7	10.5	172	951	109	35.9	25	17.6	8.4	4.7	2.4	2.9
<b>Lithuania</b>	2.1	8.4	225	1021	410	72.1	39.6	24.6	8.9	5.1	0.8	1
<b>Romania</b>	1.1	5.1	170	210	256	137	32.3	38.8	154	59.1	45.8	45
<b>Slovak Republic</b>	2.3	10.8	61.2	10	23.2	13.4	9.9	5.8	6.1	6.7	10.6	11.9

Source: EBRD, 2000.

***Investments on a decline***

Although investments and *the ratio of capital formation to GDP also decreased in all CEECs*, the rate of contraction in most cases fell short of the drop in savings, except some countries such as Latvia or Lithuania. Despite economic recession this drop in savings increasingly resulted in current account imbalances (see Figure 6). One can observe, however, that the investment ratio in many CEECs began decreasing back in the 1980s, thus even before the collapse of the communist regimes (see e.g. Temprano, 1995). Worsening efficiency of investments that produced growth results much under expectations may be one of the reasons behind that. It should be noted here that the first some years of transition were characterized by outstandingly *high accumulation of inventories* in some countries. It took some time to depreciate unsaleable goods or sell them at unreasonably low prices. That is one reason why gross



investment rates fell less than saving rates, however, this was not the case for gross fixed capital formation (GFCF). Furthermore, *it took some years on the one hand, to redirect trade from CMEA (and feeble domestic) markets towards Western markets, and on the other hand, to switch (create) production lines to more marketable products. The turnaround in investment trends usually had come some years before economies as well as saving rates reached the bottom.* In those CEECs belonging to the group 1998 this happened around 1992 or a year before or after that.

Figure 5

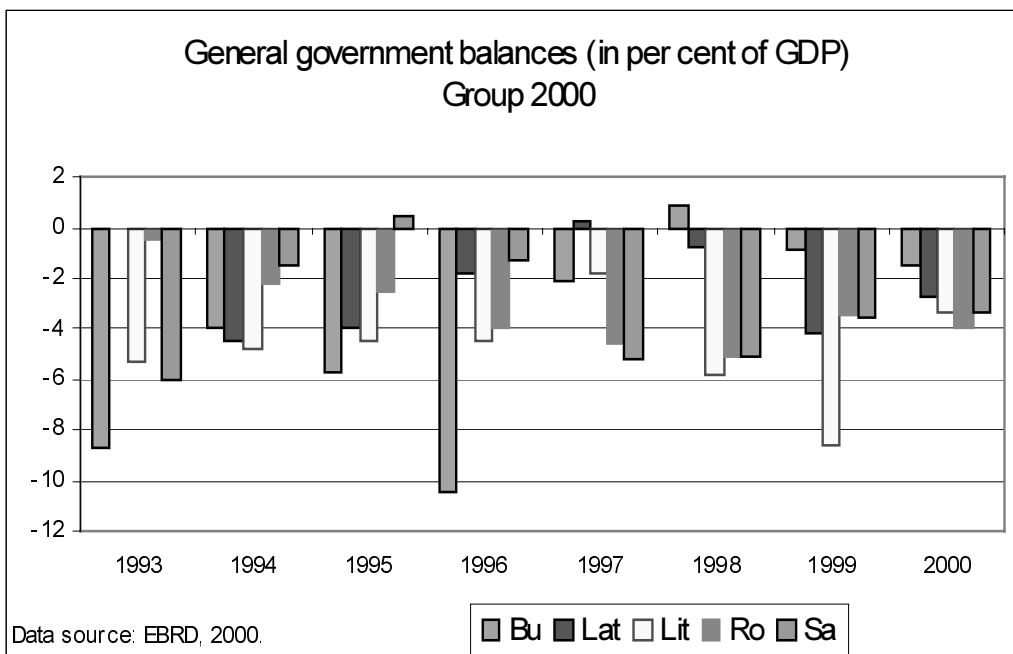
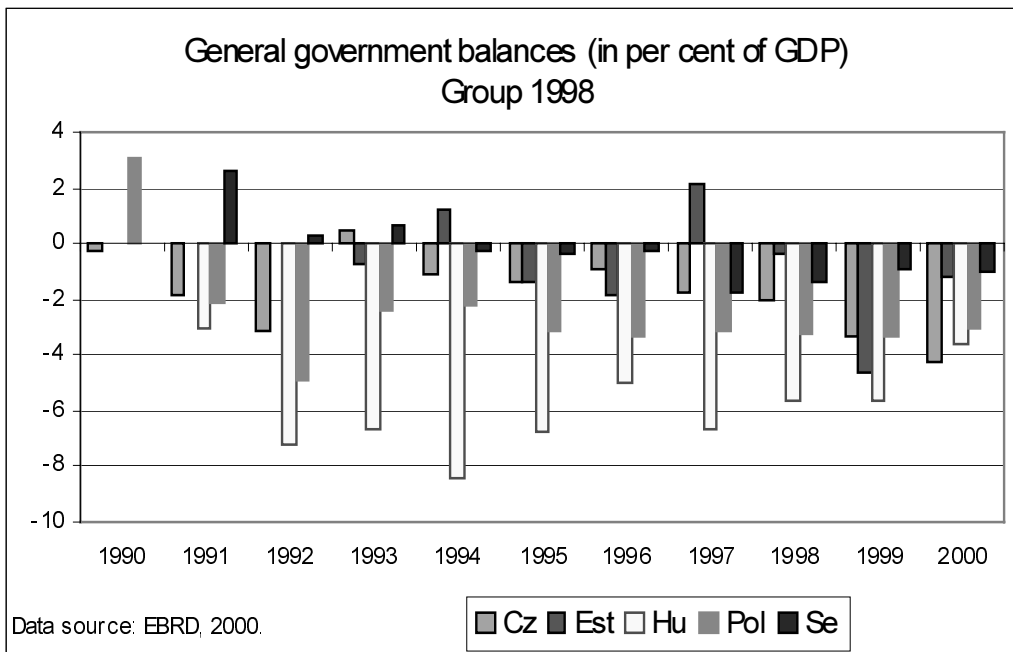
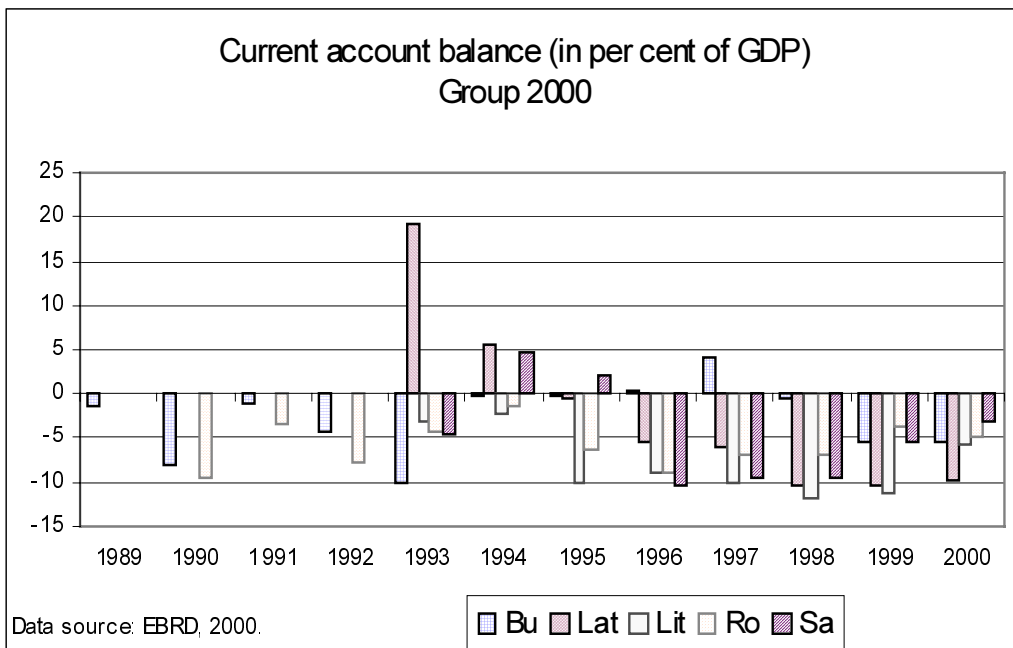
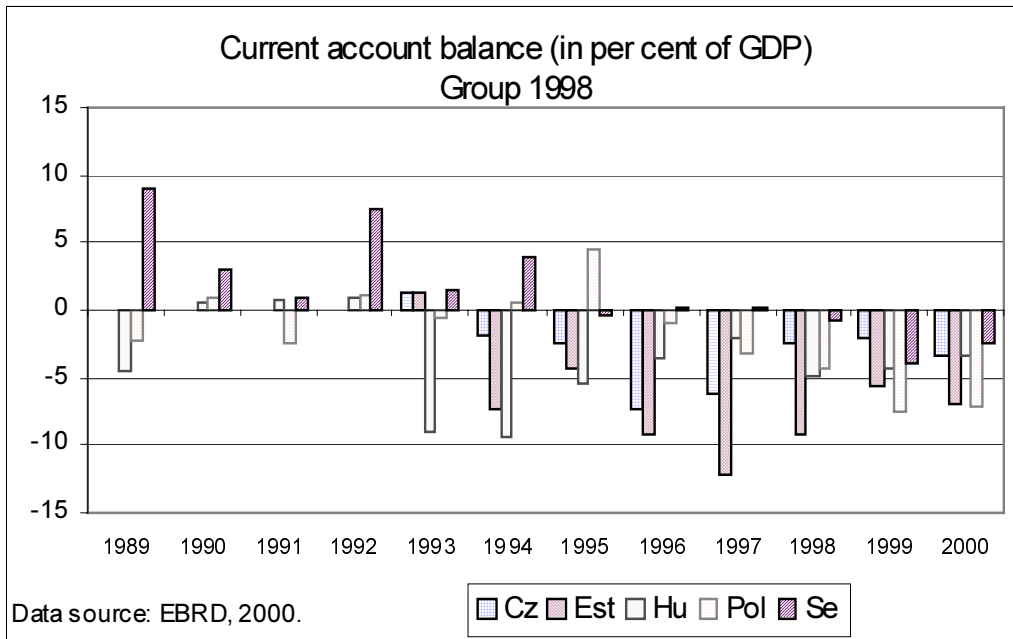


Figure 6



I should warn here that both gross investment and gross fixed investment ratios should be treated with some caution. Not only because of unreliability of data, but owing to methodological reasons. Investment ratios to GDP can grow in an expanding economy if the growth rate of investment surpasses the rate of GDP growth. Similarly, in a shrinking economy investment ratios can fall when the rate of GDP contraction is below that of investments. As a consequence, investment ratios sometimes hide opposite movements in the volume of real investments.

Taking into account both the investment ratio and the annual real change in investments we can get the following picture. As far as investments are concerned, Group 1998 countries had the worst years indeed around 1992. In the Czech Republic (except between 1997-99) there have been no actual falls in fixed investments since 1992, only a slowdown in growth in 1993. In Estonia there was a fall around its independence from the FSU (1991) and later on in 1999. In Hungary fixed investments fell in the early 1990s and in 1995. Poland experienced actual falls in its investments in 1990-91, and although investment ratios indicated further decrease in 1992-93, in fact fixed investments increased slightly, but below GDP growth rates. Slovenia suffered an actual fall in its investments also only in the early 1990s (1992). At the same time the other CEECs show rather mixed development. A common feature of their market economy development has been that all of them have registered two periods of decreasing investments: one in the early 1990s (except Romania), and the other one in the second half of the decade (see it later). Scarce data on the composition of investments indicate that *both corporate and public investments fell early in the transition*. Worsening of profitability reduced the ability of enterprises to invest from retained earnings, while increasing uncertainty related to transition and recession forced them to postpone investment decisions. Public investment (including also a big number of public enterprises at the start of transition) fell too, however, its ratio to GDP remained comparable to those of the developed market economies.

Before turning to savings, one should again emphasize the need to *interpret figures with caution*. In some years the difference between the same figures from different sources can be rather significant, also national accounts statistics are often revised up or downwards retrospectively, etc. Furthermore, I have checked the accuracy of the figures supplied by international organizations (e.g. the World Bank, IMF, OECD, EBRD) based on national statistics. Because of accounting principles the difference between the gross saving ratio (GNS) and gross capital formation ratio (GCF) should be reflected in current account balance (CA) as a percentage of GDP. However, sometimes there are significant differences between those CA figures that are derived residually from GNS and GCF, and those presented directly in balance of payments statistics (and calculated by using other methods). Although some differences are always present, such differences above a certain limit already raise the question to what extent those statistics are reliable. That is the reason why some authors use only two figures of the three and calculates the third one as a residual. (See e.g. Denizer and Wolf, 1998, who calculated gross domestic savings ratios from current account and gross domestic investment figures). Despite all of these shortcomings in statistics we may still suppose that the main trends are correct. This presumption is also supported by the fact that the statistics of all CEECs seem to demonstrate the same main trends.

### ***Elimination of disequilibrium savings***

One of the common features of post communist development of the CEECs has been that without any exception, all have suffered a *dramatic fall in their saving rates*, starting either in the late 1980s or early 1990s. On average the declining trend of saving did last for four years, plus/minus some years. (See Figures 7 and 9) As a consequence, saving ratios to GDP more than halved within a few years in the majority of countries, and fell but less sharply in the other countries (the Czech and Slovak Republics and Slovenia), as well. However, there seems to be no robust correlation between the magnitudes of fall and the subsequent rebound. Some countries have suffered more

serious fall in their saving rates, however, the adjustment eventually ended up in higher saving rates than in the other countries with less radical fall (see e.g. Hungary, Latvia, Romania and Slovenia). But this is by no means a strong regularity. Some analysts have argued that those countries which suffered less dramatic falls in their saving rates could not have eventually refrained from further decreasing and this has been mainly the result of *postponed or less radical (effective) structural adjustment*. This holds some truth (see e.g. the case of Romania), however, there are some countries (the most well-known examples are the Czech and Slovak Republics) where saving ratios have never decreased below "normal" (e.g. EU-15 average) level (25% and 22% respectively) in the 1990s. Certainly, it is rather difficult to identify a normal or equilibrium level of savings. Beside common factors it is influenced by idiosyncratic components and individual characteristics as well, including policy choices and initial conditions. We can find *loose, in many cases even a negative correlation between saving rates and growth, at least during the adjustment to equilibrium saving rates*. (See Figure 9) This relationship is in sharp contrast to what have been observed in the majority of countries outside this region. But this is not quite surprising during large external shocks and especially in the transition to market economy. And as the experience of the CEECs does show us it takes a long time for market mechanisms to get working properly. Here are some examples: In Hungary in the period 1994-96, despite definite rebound in saving rates (by 10 percentage points or more) growth remained subdued or even slowed somewhat. On the contrary, despite falling saving rates, (by more than 5 percentage points) in Romania recovery strengthened in 1994-95, etc. In the CEECs it is also *difficult to decide whether growth pulled up savings or vice versa*, however, it seems certain that *in seven out of the 10 CEECs growth was restored the same year when there was also a turnaround in saving trends*. With only a few exceptions, in the early phase of transition unmanageable external imbalances (i.e. current account deficits) did not evolve. There are several reasons to explain this. In some countries not only saving rates declined, but also investments. In the other countries pre-transition levels of savings were so high, and much above investment rates, that a sharp reduction in saving rates, only eroded former surpluses on the current account. Furthermore, during the years of transition-related recession with unpredictable political developments, high *macroeconomic instability*, deteriorating profitability of enterprises, falling real incomes of households etc. effective demand remained limited for investment goods. Also the inflow of foreign investments was more moderate as compared to the following years.

Figure 7

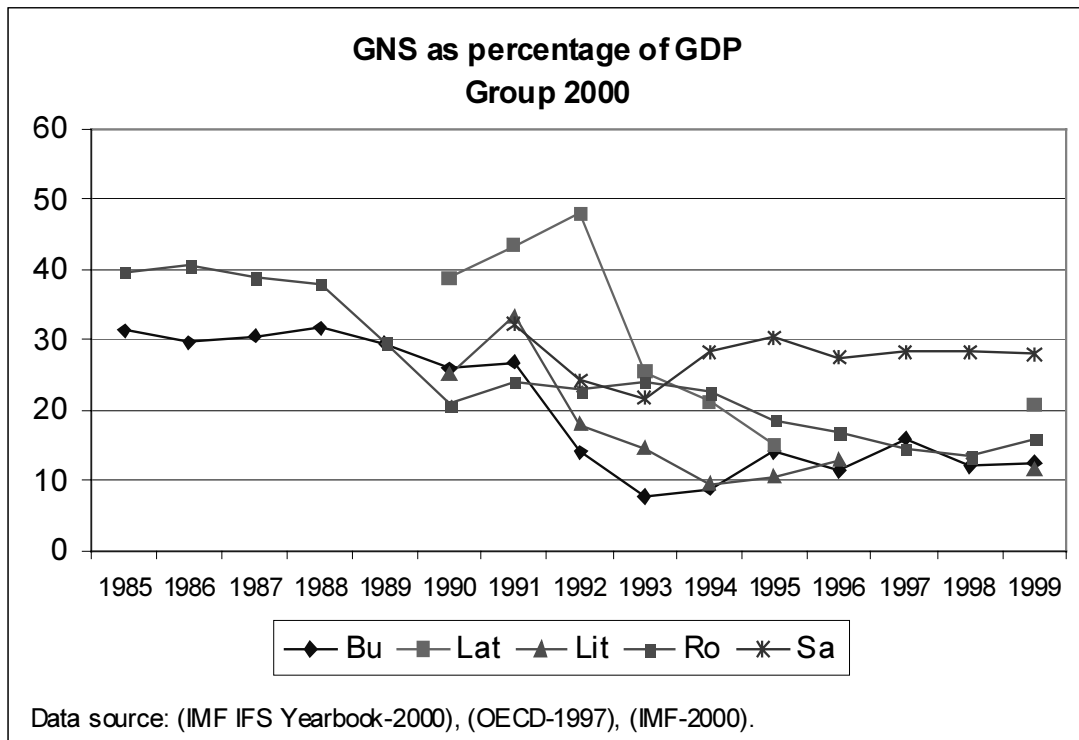
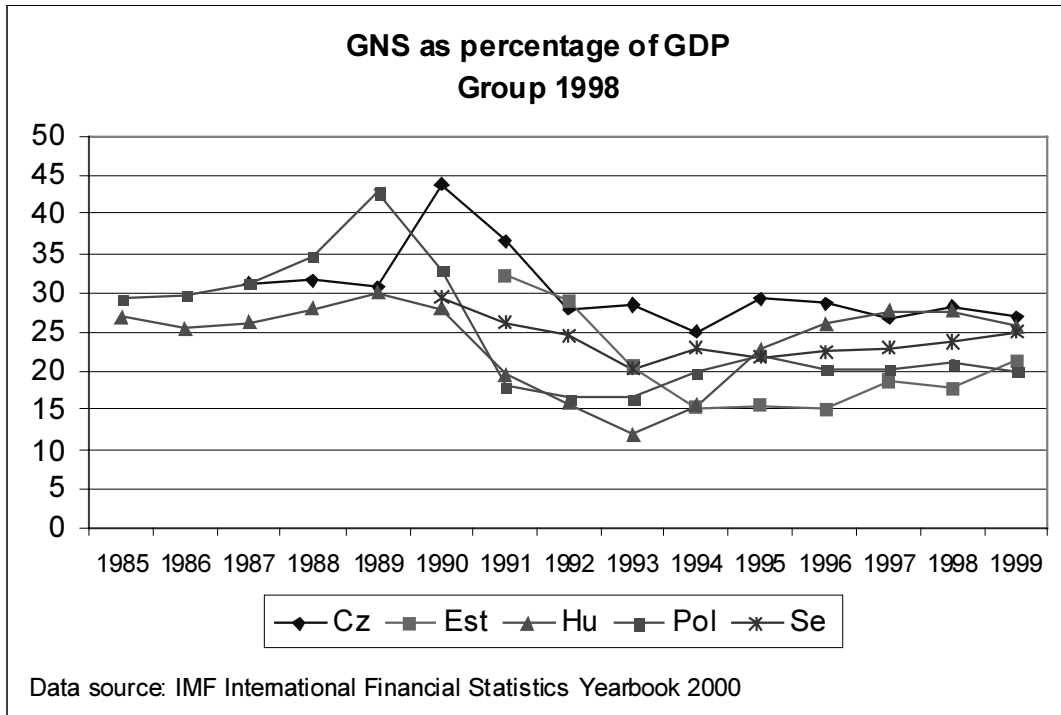


Figure 8

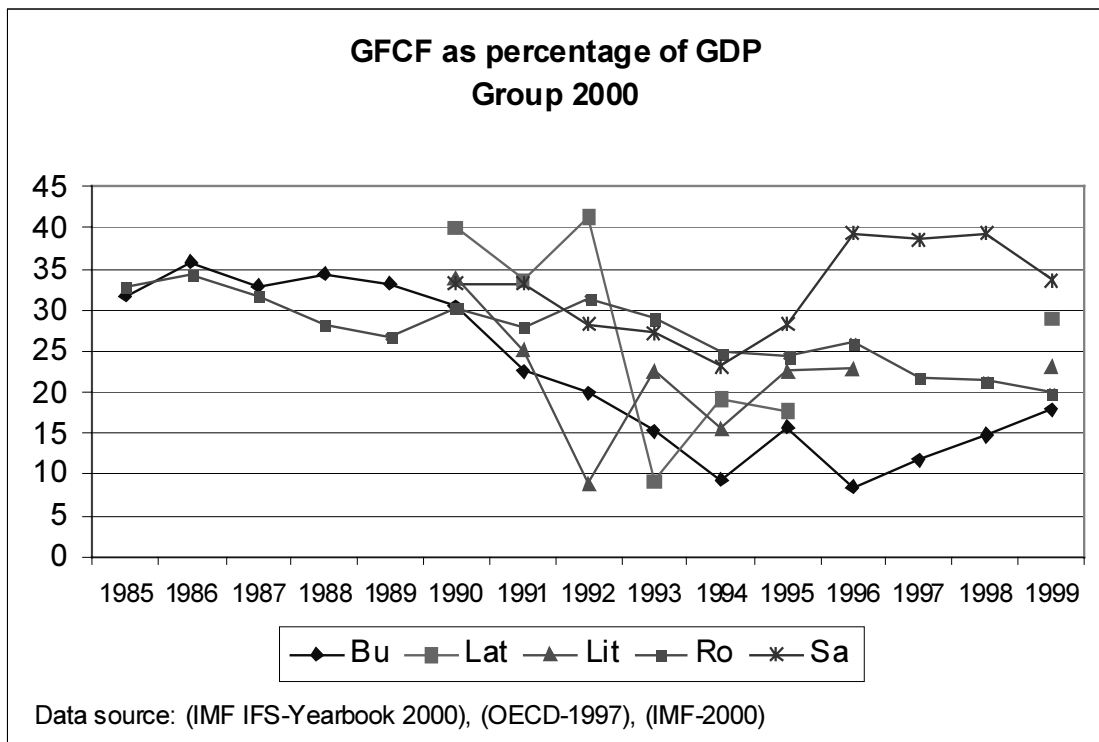
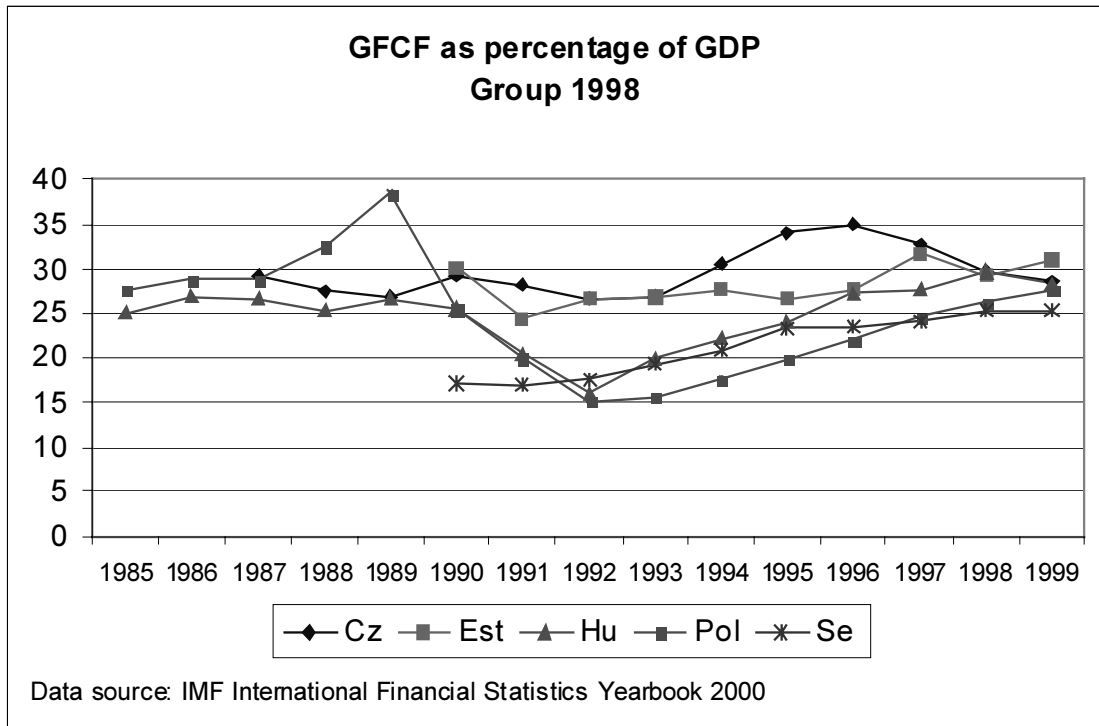


Figure 9

**Major macroeconomic indicators of savings and investments, the current account, and the growth of GDP**

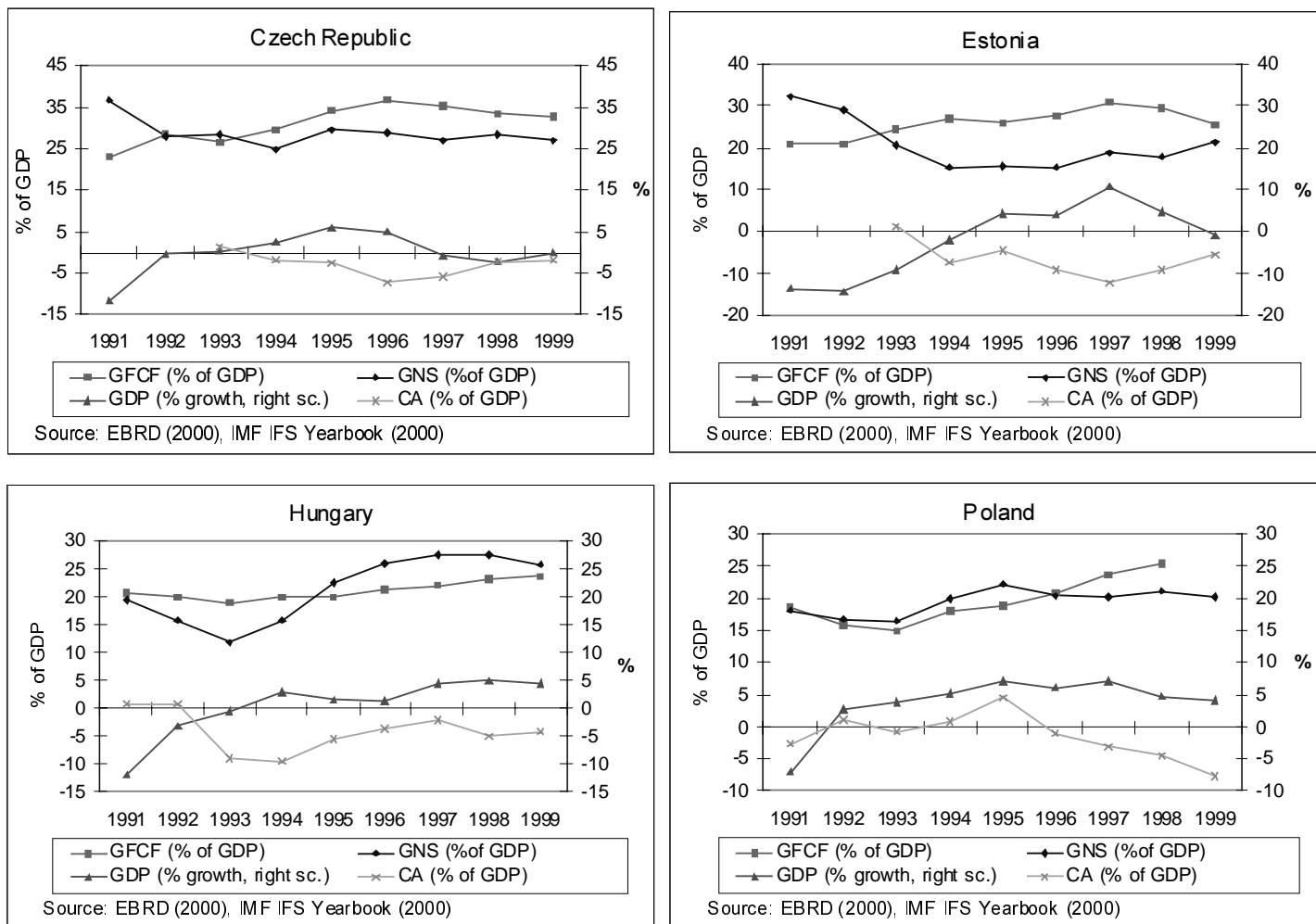


Figure 9 (cont.)

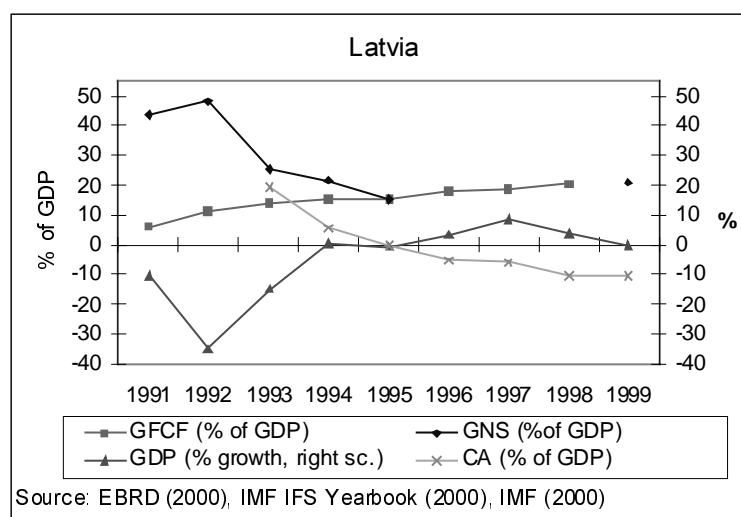
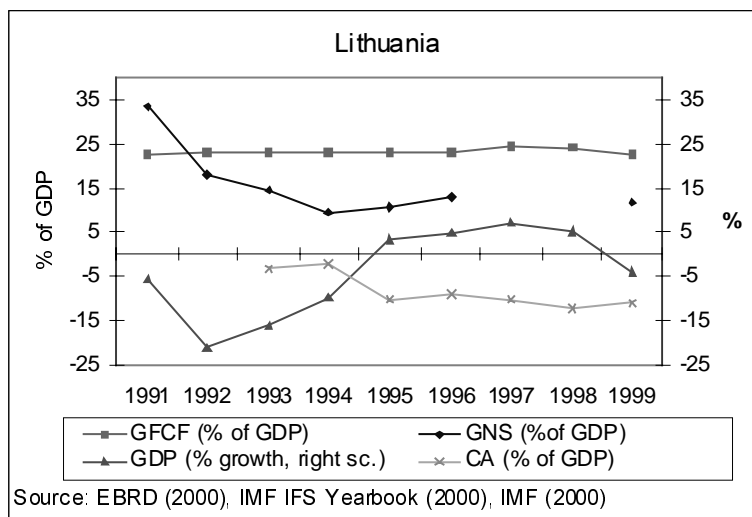
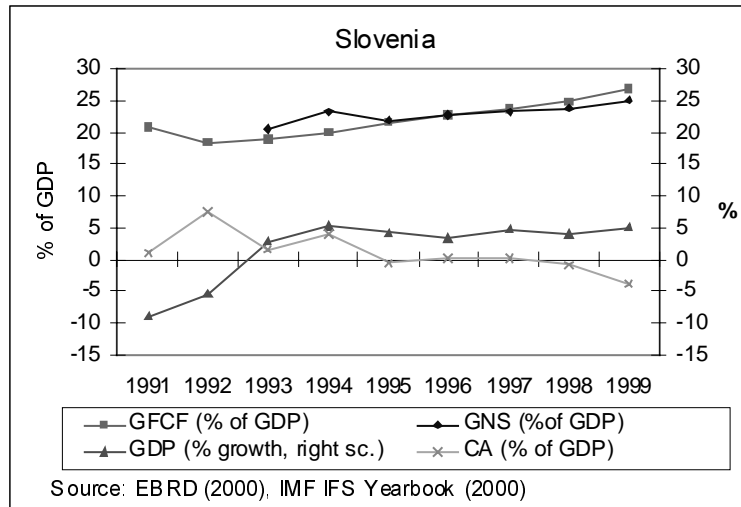
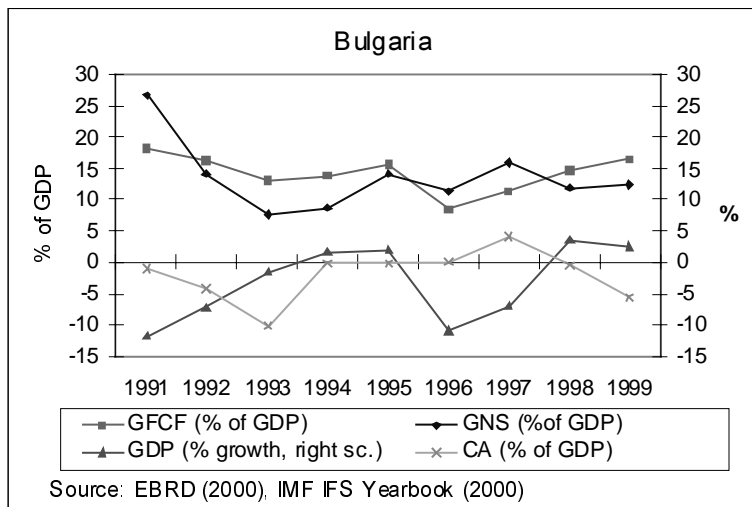
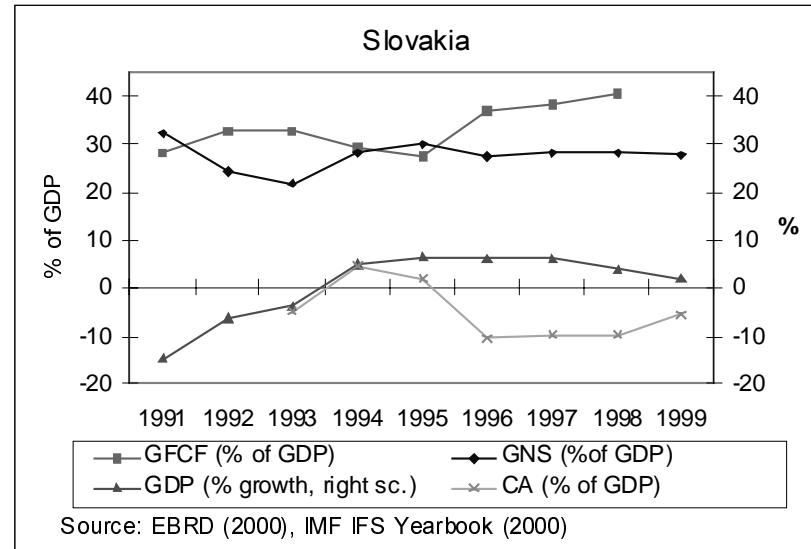
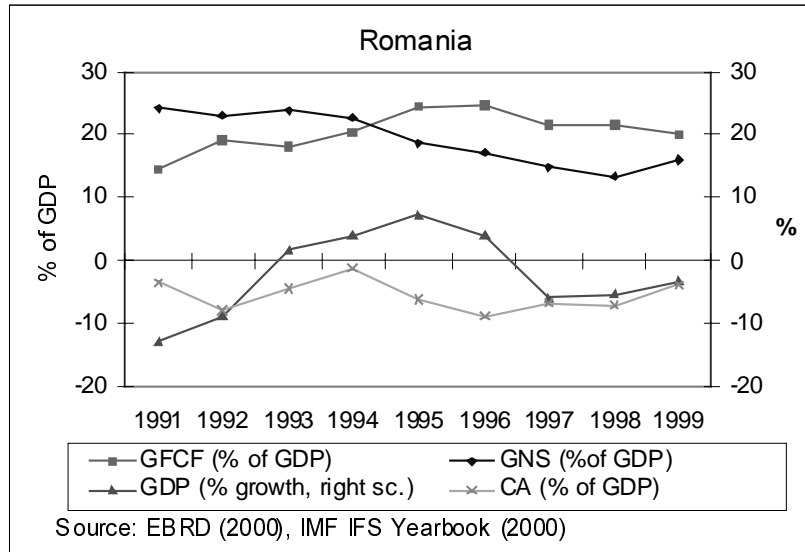




Figure 9 (cont.)



### ***Changing composition of GNS: household savings up - government and corporate savings down***

But how can we explain the falling trend of saving rates throughout the region? Interestingly, not all the components of GNS fell in the early years of transition. *The fall was mainly due to reduced corporate savings, and to a lesser extent, worsening saving position of the government sector.* Contrary to this trend, *household saving rates started to recover* from their low pre-transition levels. However, the pace proved not enough to offset the declines in the other two sectors (see e.g. EBRD, 1996; Temprano, 1995).

In the first years of transition most CEECs suffered a *sharp deterioration in their government savings*. They turned not only negative but many countries (except e.g. the Czech Republic or Slovenia) ran to high general government deficits, the range of which in some countries (see e.g. Hungary, Bulgaria) reached up to 6-8 per cent of GDP. Even the better budget position of some Baltic states was the result of falling public investments. *Increasing public dissaving was the consequence of several factors* including drop in revenues due to output decline and large losses in state enterprises, as well as persisting public spending due partly to rising unemployment. The decline in tax revenues was usually not only the consequence of the recession and worsening profitability of enterprises but, at least in the short run, of tax reforms and the expanding "gray economy". Furthermore, in the early years of transition some CEECs (e.g. Poland, Hungary, Bulgaria) suffered from serious *external indebtedness*, and servicing the debt put for some time a heavy burden on these governments' shoulders and limited significantly their room for maneuvering. This indebtedness, including the debt management schemes highly resemble what happened to Latin-American countries.

The structure of government expenditures also changed, capital expenditures fell sharply in almost all of the countries. This was partly the result of the gradual *elimination of capital transfers to enterprises* as well as the rationalization of government investments. Certainly, it took some time for the governments to find and shape their new role under the market economy. In the pre-transition period governments used to undertake large investment projects, and owing to the big number of industrial state-owned enterprises, not only in such sectors as infrastructure. As privatization of state-owned enterprises progressed, the role of the governments changed noticeably in investment decisions. Under these circumstances it seems not so surprising that *government investments fell considerably* throughout the region.

Although no comprehensive figures are available on saving rates of the corporate sector in this period, scarce information on the profitability and cash-flow position of the larger enterprises indicates that *corporate savings fell sharply* at least in the early years of transition. During socialism, enterprises did constitute the main pillar of the gross saving system, thus the subsequent *deterioration in the corporate sector's financial* (and hence saving) *position*, a decline in profitability, pulled down aggregate saving, as well. This came as a consequence of large swings in relative prices, reduced government subsidies, recession, collapse of the CMEA, increased competition and soaring inflation, etc. That time the number of those enterprises coming close to become bankrupt or at least getting in *desperate financial situation* increased sharply, many of them were unable to pay for obligations to suppliers, workers or creditors.

The ratio of *household saving* to GDP *has increased* almost unanimously across the CEECs since transition began. Although no reliable statistics are available at household level for all the CEECs, especially no complete time series, based on information and data of some countries we may get an insight how household savings developed during transition. In the pre-transition period household saving as a percentage of disposable income was at very low level in the CEECs as compared to most EU countries or other market economies. In those countries where these data are available, household savings ranged between 3-8% in the mid 1980s. (It should be noted, however, that even for some OECD countries no reliable time series are available for household savings and they are difficult to compare with each other due to different methods used in compilation. /For more details, see e.g. OECD, 2000/. Nevertheless, one can clearly see that even the developed market economies differ widely in respect to this indicator.) Looking at available time series (see e.g. Temprano, 1995) one can see a definitely increasing trend of household savings in the early years of transition, in many countries to double digit rates (e.g. in Poland to over 20%). There are several possible explanations behind this trend (a trend not maintained in the longer run, as we will show it later). Some argue that the share of household income in GDP is likely to have risen as enterprise profitability fell (EBRD, 1996). Temprano (1995) has pointed out that *in market economies much greater proportion of national income is distributed to households* and, therefore, a larger share of national saving can be accumulated there. Thus, transition to a market economy by transferring to a significant extent of the ownership of the national wealth from the state to the private sector should increase the household saving rate. As was presented in the previous section, during socialism there were neither *ability* (e.g. due to ownership restrictions and strict central control over wages and income, limited choice of instruments) nor special *motives* for households to increase permanently their saving levels. However, this was partly offset by forced saving due to the shortage of consumer durables. It is supposed that forced saving, to some extent, took the form of monetary overhangs. Since transition began, the *saving patterns of households have changed considerably*. As for motives, the uncertainty (over future income and social security, incl. public pension) increased radically. Jumping level of unemployment and soaring inflation were in sharp contrast to what people got accustomed to. This raised *precautionary motives* for saving and the desire to smooth consumption over the life-cycle, the main motives in a market economy. At the same time high inflation seems to have eroded much of the real value of financial assets of households. Although there are debates concerning the importance and magnitude of monetary overhangs accumulated before transition, it is assumed that part of them was eliminated in the first years after (and in some countries even before) transition and the other part was eroded by inflation. As a result of *market liberalization*, the supply of goods (incl. consumer durables) has improved in most countries, also it has become increasingly possible to buy the products abroad. (In Hungary, for instance, the opening of the frontier and easing of customs rules led to a sharp but temporary increase of one-day buying tourism to the neighboring Austria where people bought the badly needed durables such as refrigerator, video player, etc.)

Several other transition-related peculiarities can be mentioned that diverted temporarily household saving rates from their long-run level. In the following we list some of these. Despite increasing uncertainty, household saving rate turned even negative in the former Czechoslovakia (also in Bulgaria) reflecting a boom in purchases in anticipation of the price liberalization. In 1991 in Hungary the government created an

incentive to accelerate repayments of mortgages with early-payment discount (see EBRD, 1996). As a result, household saving recovered steeply that year but fell again later on. Another interesting feature has been the sale of the state (self-government) owned housing stock in the transition countries. *Privatization of dwellings* as well as state-owned enterprises has increased the choice of saving instruments (both in real and financial assets). The same results emerged by the new opportunity of setting-up new businesses. Many of them were small, often family-owned enterprises. Forming these small businesses was also encouraged by increasing unemployment. On the other hand, it is assumed that a fall in corporate savings and investment (and a simultaneous increase in household saving) to a considerable extent stemmed from the peculiarities of the statistical classification, i.e. investment by small ventures was counted as household saving.

### **3.1.3. The stage of stabilization and restored growth**

Around 1994 (some countries such as Poland, Slovenia, Romania before this year, some others such as Estonia, Lithuania after that) CEECs started to *get over their transition related recession* and achieved economic *stabilization* (see Figure 3). Despite common features of the transition (i.e. deep recession at the beginning, a U turn in GDP and saving/investment rates etc.) CEECs are rather different as for their initial conditions, policy choices and the results. Although following several years of perpetual contraction in GDP, growth has been restored in all of them, *CEECs have proved very different both as for the growth rate and its sustainability*. Now, it may be worth referring back to Figure 2, indicating the level of real GDP in 1999. Different positions of the countries stem not only from different growth trends but the level to which they fell back in the first years of transition. The dividing line between countries can be drawn to what extent they have succeeded to develop market mechanisms and replace destructive forces by building ones. It seems very important to note here that no strong correlation can be found between the time when growth was restored and how far a country has gone in market economy development. *There is a big discrepancy across the CEECs concerning both the speed and extent of economic reforms*. By postponing or at least mitigating painful economic adjustment both at macro and micro levels countries could escape further output contraction (and ease social unrest), at least in the short run. To some extent, this can be understood, since *nowhere transition could be completed at a one stroke, but in more stages building on each other*, involving also several setbacks and running-up to the most difficult tasks. Nevertheless, countries and their governments have proved rather dissimilar in policy consistency and determination towards market reforms. There seems to be less difference in basic reforms like price and trade liberalization, but more in further steps such as privatization, corporate governance, institution building, financial reforms etc., although *these areas seem to be the very ones determining whether a transition country gets on a sustainable growth path*. Although it is rather difficult to define when a country passes through the stage of stabilization, the key question is whether recovery is strengthened and sustained in the longer run. In the opposite case, countries either undergo a prolonged period of stagnation or what is worse, cannot prevent further recession. One can cite several examples for both. Stabilization involved also efforts to curb inflation, which was indeed reduced in most countries, however, it has remained stubborn, in the majority of CEECs well over single digit rates (see Table 1).

### ***Stabilization of savings: do they have definite direction?***

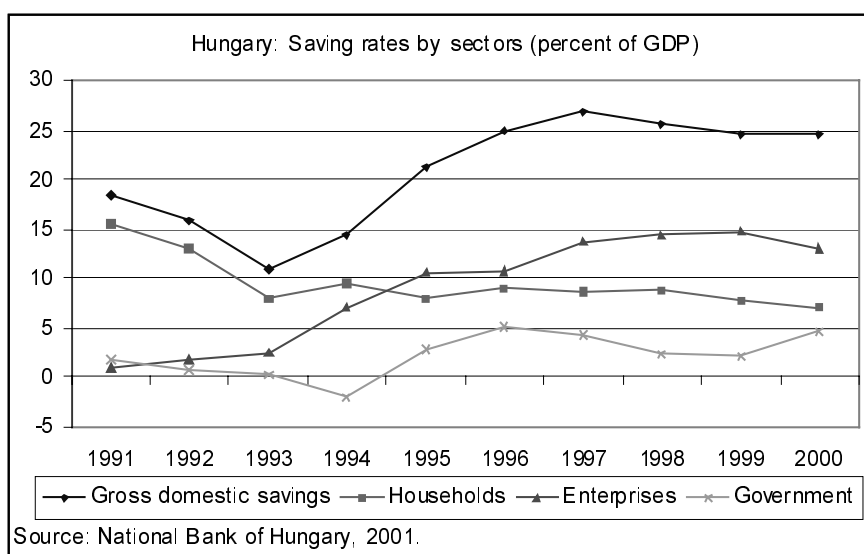
Following a sharp adjustment at the beginning of transition *saving rates started to stabilize in the mid-1990s*; GNS, both in real terms and as a percentage of GDP, increased from very low levels. *There were only few countries where, despite the declining trend, the GNS to GDP ratio remained at more manageable levels and also above EU-average.* These CEECs are the Czech and Slovak Republics and Slovenia. In the Czech Republic, as far as statistics are correct (there are some contradictions between figures from different sources), the GNS ratio has never dropped below 25% since the start of transition. In Slovakia GNS ratio moved also in the range 25-30% in the second half of the 1990s, while in Slovenia it increased gradually from the 20 some percent low reached in 1995. To some extent this can be attributed to a more balanced position of the government sector in these countries as compared to other CEECs (although this may be less true for Slovakia). These countries were also among the less indebted CEECs at the beginning of the transition (while in some countries such as Hungary, Poland, Bulgaria the ratio of external debt exceeded half of GDP). Furthermore, these countries may have followed a more cautious policy stance as for price liberalization, large-scale privatization, structural adjustment, at least at the beginning.

We should add that the CEECs have applied very different exchange rate policies, as well. Due to inflation under better control (actually Slovenia could efficiently reduce high inflation rate within a few years), neither the profitability of enterprises nor the financial wealth of households eroded so dramatically as in other countries with much more stubborn inflation rates. In some CEECs real wages decreased for several years, or at least increased at a moderate pace (see e.g. Hungary, Romania, Bulgaria). Other countries (e.g. the Czech Republic, Slovenia) followed different a route: following a sharp initial reduction in the early 1990s real wages improved definitely and almost continuously.

The recent OECD Outlook (No. 68/2000) presents household saving figures out of the Eastern European member countries only for the *Czech Republic*. Since 1993 (the year of split of Czechoslovakia), except a one year drop, the household savings rate has increased continuously, from 6% in 1993 to 12% in 2000. This could partly offset the increasing dissaving of the general government sector. But *the trend of increasing household saving has not been unanimous throughout the region.* Take, for instance, the case of *Hungary*. Figures on *household saving ratio indicate considerable fluctuations over time.* First, it increased in the early 1990s to double digit levels (about 15% in 1991) offsetting to some extent the fall in corporate and government savings, however, it fell back in 1993 and although fluctuated, remained mostly in the range 5-10% afterwards. In recent years the household saving ratio has gradually decreased to an estimated 6-7%. (EBRD, 1996; National Bank of Hungary, 2000/a-b; Várhegyi, 2000, Árvai et al., 2001). Notwithstanding fluctuating and more moderate household savings, gross savings of Hungary increased continuously since 1994. Gross savings to GDP in Hungary increased from a low of about 11% in 1993 to some percentage points above 25% in 1997-98, but seems to have diminished again recently. Looking at figures of general government balance (see Figure 5) one can say that the significant *increase to a large part could have been attributed to improving savings of the corporate sector.* (For development of the main components of gross savings in Hungary see Figure 10). *Poland* also experienced a sharp fall in its GNS ratio to about 16.5% in 1993. Despite

positive adjustments in saving in the subsequent years, GNS to GDP has stagnated since then at a level only slightly above 20%. Contrary to expectations, despite high real interest rates, the saving rate of households fell back in Poland by about 5 percentage points to 3% in 1999 (see Árvai et al., 2001). Both in Hungary and Poland perceptible improvement in income expectations as well as expanding credit flows to households can be identified as important factors behind the recent decreasing trend of household savings. Interestingly, despite its GNS ratio that stagnated and remained below those of most other countries (at least in the Group 1998), Poland produced by far the highest average growth rates among the CEECs in the second half of the 1990s. This highlights the previous finding that contrary to many other countries in the world *during transition the correlation between the GNS ratio and growth seems to be less robust* (or even negative). *Only in an advanced stage of transition and following several years of adjustment the co-movement of savings and growth starts to be more manifested* (see Figure 9). Following stabilization of domestic savings in 1995, *Estonia* has succeeded to increase its GNS ratio since 1997. According to IMF figures (based on available national accounts statistics), the GNS to GDP ratio increased to above 20% in 1999. Although national statistics (Bank of Estonia, 2000) indicate GNS over 20% of GDP only in some quarters of 1998 and 1999, the trend of moderately increasing savings can be identified. According to the Bank of Estonia, the recent trend has been due to cutting current expenditure in the public sector as well as higher profitability of the business sector as a result of discovering new markets. The GNS ratio of *Slovakia* has remained among the highest in the CEECs (close to 27-28% in recent years). Interestingly, although Slovakia kept its saving rates high, growth slowed down in most recent years. *Romania* stopped the falling trend of domestic savings at 20 and some per cent of GDP in the early 1990s, but following a period of apparent stabilization, the GNS ratio started to fall back again, beginning in 1994-95. As far as the recent IMF figure for 1999 is correct (IMF, 2000), *Latvia* managed to raise its national saving rate to 21% of GDP by 1999. (Note: Figures from other sources (such as UN ECE, 2001) do not confirm this favorable trend). However, *neither Bulgaria, nor* the third Baltic state, *Lithuania could have moved their savings far from the very low level achieved in the mid 1990s.*

Figure 10



### ***Government dissaving pulls down GNS in several countries***

As far as government savings/dissavings are concerned, apart from some countries where budgets have been more or less in balance throughout the 1990s (e.g. the Czech Republic up to 1999; Estonia except in 1999; Slovenia) *most other CEECs produced large general government deficits* with severe repercussion on their gross saving rates, especially countries such as Hungary, Bulgaria (up to 1997), and Lithuania. However, no clear-cut trends can be distinguished in this respect. Hungary, for instance, despite restored growth and efforts to cut current spending, could not have managed to reduce its persisting general government deficit (over several years exceeding 6% of GDP) owing to large and increasing deficits on social security and health funds, and to some extent the heavy burden of debt servicing. Also in Poland, following some years with smaller deficit, general government deficit seems to have got stuck at a level about 3% of GDP. Some countries, like Romania or Slovakia, that achieved good results in deficit reduction in the first half of the 1990s, suffered from a rebound in deficit subsequently. Bulgaria, following a successful but late stabilization, and as a result of austerity measures has managed to put its general government finances largely in balance since 1997.

### ***Divergent investment trends in the region***

*The CEECs differ widely in the timing of the turnaround in investment performance.* Most of the countries in Group 1998 started to lift investment rates from the bottom reached in the early 1990s, around 1993 or a year before. *All of them have managed to increase investment rate to levels that can constitute a solid basis for long-run growth.* Economic restructuring, the replacement of obsolete capital stocks, keeping up with technological development world-wide that seem to be a precondition for long-run sustainable growth in the CEECs require huge capital investments. Without any doubt, *the CEECs at much lower level of economic development in order to catch-up should reach and maintain investment rates well above those of most advanced market economies, including EU countries.* As the recent EBRD Transition Report points out (EBRD, 2000), in the initial phase of transition, growth was hardly driven by capital investment since the available capital stock was already large. Due to over-investment in the pre-transition period and dramatic contraction of output, for some time *capital (stock) to output ratio was rather high* in the CEECs (especially in the Baltic states) as compared to developed market economies. Because of large existing capital stocks depreciation requirements are also high. Only in the most advanced CEECs, where efficiency of capital allocation has improved considerably, capital output ratio seems to have stabilized recently. Neither in the Czech Republic nor Estonia the GFCF ratio actually fell below 25%, but recovered to new highs, in some years exceeding 30% of GDP. Slovakia has never gone through a radical fall in its investment rates (comparable to other transition countries), but its rates were boosted to record highs (close to 40%), a level rarely seen in Europe. By contrary, Hungary, Poland and Slovenia reached bottom in the early 1990s, at a level between 15-20%. However, *all of them could have gradually increased their investment rates to new highs* by the end of the decade, a level well above EU-15 average. *The other countries show rather mixed development of investment.* Although statistics are scarce, based on IMF figure for 1999, Latvia seems to have managed to lift investments from their mid-90s low. While Lithuania has increased its GFCF ratio from the dangerous low under 10% of GDP to over 20% since the mid-1990s, it seems to have been unable to lead further up. Also the trend shows

considerable fluctuations over time. Both Bulgaria and Romania have shown a rather negative trend in investments. Starting from the late 1980s Bulgaria suffered a dramatic and continuous fall in its GFCF. It has succeeded to improve its rather weak investment performance since 1997 only, parallel to the results achieved in overcoming its deep macroeconomic crisis. Although Romania maintained an investment rate much higher than in most other CEECs well into transition, it could not escape a further decline. Actually, contrary to trends of most CEECs, the investment ratio of Romania has decreased almost continuously since 1993, to a level, which is the second lowest only to Bulgaria.

### ***The other side of the coin: worsening external imbalances***

When looking at Figure 6, we can see that *external disequilibrium has worsened throughout the region as transition proceeded*. In the early years of transition, except some extraordinary cases, due to recessionary trends and depressed domestic demand, current account remained either balanced or had a deficit at more manageable level. However, as growth was restored and recovery got a new momentum *current account deficits increased considerably*. Although some countries have managed to improve their export performance due to favorable structural changes in the export sector and better market access, imports have increased everywhere as a consequence of brisk domestic demand and high import intensity of production in some countries. In the last some years even those CEECs run deficits on current account which had had surpluses before. *In the second half of the 1990s several transition countries suffered from current account deficits in the range 5-10% of GDP*. All of the Baltic states belong to this group, some of them (most notably Lithuania) having had deficits above 10% of GDP over a longer period of time. Of the more advanced CEECs, Hungary had current account deficits over 9% of GDP both in 1993 and 1994, that together with unmanageable general government deficits forced the Hungarian government to introduce austerity and stabilization measures. Also the Czech Republic *had to make corrections* as a consequence of increasing external disequilibrium and the currency crisis that affected the Czech koruna in 1996-97. In early 1997 the Czech government introduced two packages of austerity measures and adopted a managed float exchange rate regime to replace the former fixed exchange rate system, a change that resulted in a significant real appreciation of the koruna. By now Slovenia could have kept its current balance under control. For a long period of time Poland also could, but one can observe a continuously worsening current account position in the second half of the 1990s. Of the other CEECs mainly the Baltic states have produced large, and in the long-run hardly sustainable current account deficits. These countries suffered much also from the Russian crisis in 1998-1999 that reduced sharply their export market and produced some uncertainty among foreign investors. In the recent two years, due to austerity measures (including an import surcharge), Slovakia has managed to pull back current account deficits from a level about 10% of GDP in 1996-98.

Taking the issue of current account balances from an other point of view, the *widening disequilibrium indicates divergent movement of saving and investment rates*. We can see that although in most CEECs saving rate has recovered from their post recession low, its growth rate has in several cases fallen short of that of investments (see e.g. Slovakia, Poland), or has been not high enough to narrow significantly the gap (see e.g. Lithuania). In some countries widening current account deficit can be attributed not to slow growth of national savings (as compared to investment), but actually to its



declining trend (see e.g. Romania). The gap between GNS and GCF ratios must have been financed by the inflow of foreign capital (foreign savings). *The widening gap between domestic savings and investments can for a longer period of time be maintained only if an increasing inflow of foreign capital fills it.* Although better access to foreign saving can ease the constraint of domestic saving on investment, thus can favorably contribute to speed up transition and catching-up, the vulnerability of countries also increases. The degree of vulnerability depends, among other things, on the current account deficit as a percentage of GDP, the weight of foreign capital in the host economy, as well as its composition (i.e. FDI and portfolio investment, long-term and short-term capital investments). *High sensitivity to sudden removal of foreign capital inflow and its fluctuations* (as has amply been demonstrated by some cases in the region, and also in connection with the Mexican and Asian crises) *can only be reduced by increasing macroeconomic stability and lifting national savings more close to investments.*

#### **3.1.4. Putting the economy on a sustained growth track - towards EU membership**

Although all the ten CEECs have already had Europe (or Association) Agreements with the EU for several years (and before that trade and co-operation agreements dating back to early transition) they have begun official negotiations for EU membership only recently, either in 1998 or 2000. These countries must have undergone a profound transformation during transition to be able to meet challenges they are expected to face in the EU. However, the requirements against a candidate seem to be much higher now than some decades ago when other less developed countries joined the EU. Since pre-accession transfers from the EU by now has remained below requirements associated not only with preparation for joining to the EU but market economy transition, CEECs have been forced to provide for the necessary finances both by increasing the inflow of foreign capital and higher domestic savings. Looking at countries taking part in former enlargements of the EU we can find *several similarities* between those and the recent candidates. Here I would refer to some of them. For me Slovakia's development in the 1990s, for instance, is resembling to that of Portugal, at least in a quantitative sense, as in both countries sustained high investment rates have boosted growth, although quality differences behind the figures cannot be neglected. At the same time, some similarities can also be found between Hungary and Ireland, or Poland and Spain, at least in respect to the way and extent foreign (direct) investment has contributed to improvements in the export sector, etc. Much of the economic reforms in candidate countries should have been carried out even without applying for EU membership. A lot of obligations (e.g. trade liberalization) are related to membership in international organizations like WTO, IMF, (OECD) etc. Nevertheless, *the ultimate goal of eventual EU membership has encouraged (and forced) countries to progress with far-reaching but sometimes painful reforms* that can constitute a solid basis of sustainable growth, but also has offered convincing arguments why to do this at much higher speed (and in some fields in a more profound way) than otherwise would have been required.

Indeed, we can observe a definitely *improving trend in the recent macroeconomic development* of most CEECs. Preliminary data suggest that all of the

candidate countries have achieved positive *growth* by 2000, many of them higher than the EU-15 average (an estimated 3.5% in 2000). There are few exceptions. One of them is the Czech Republic where growth has just been restored following *macroeconomic corrections* of the previous years (see Figure 3). In three other CEECs GDP growth rate fell short of EU average. Following a recession in 1999 which was related to a large part to the Russian crisis, Lithuania restored growth in 2000. Positive growth in Romania that was registered in 2000, came after several years of recession and due to adjustment programs supported by the IMF and the World Bank. Slovakia seems to be in another phase of growth than the other CEECs. Here the austerity measures introduced in mid 1999 to reduce current account and fiscal deficits pulled economic growth back from rates above 5% which the country had enjoyed for several years.

Annual *inflation has been reduced* in most CEECs close to or under 10%, in some countries even under 5% (see table 1 and Figure 4). To this segment do belong most countries, including all of the Baltic states and Bulgaria. Romania has yet been struggling with high double digit inflation rates, whereas in Slovakia inflation has recently rebounded again partly due to switch over floating exchange rates.

Preliminary data suggest that by 2000 *general government deficits* of the candidate countries *have been reduced* below 4% of GDP (see Figure 5). The only notable exception is the Czech Republic, where both fiscal deficits and public debt are on an increase. As for external equilibrium, *current account deficits have been kept under control in several but not all countries* (see Figure 6). As argued, the deficit can be maintained in longer-run during transition and it can have favorable impact on growth, however, *above a certain limit it can endanger macroeconomic stability*. Those countries having run current account deficits above approximately 5% of GDP in longer period of time should carefully monitor these developments and make the necessary steps to put it under control in time. In 2000 especially Lithuania, Estonia and Poland had to face this risk. Since the stabilization stage of transition several CEECs have been forced to decelerate growth by introducing some kind of adjustment measures. This indicates that *although growth has been restored in all the CEECs, many countries have proved unable to sustain it in the longer run*. This highlights again the importance of sound macroeconomic foundations, development of institutions and coordinated policies.

As for national savings, the GNS to GDP ratio has increased to levels in the range 25-30% in four of the ten CEECs, namely the Czech Republic, Slovakia, Hungary and Slovenia. This *level* is well above the EU-15 average of 21 per cent in 1999 and is *comparable only to that of Ireland and Finland among member countries*. This level of domestic savings, if sustained, can constitute a solid foundation for long-run growth and catching-up without too dangerous level of reliance on (often volatile) foreign savings. Of the other CEECs Poland, Estonia and, as far as the IMF figure is correct, Latvia have also achieved saving rates above 20% (close to the EU-15 average), however, because previously all of them have had much higher investment rates current account imbalances have persisted. By the end of the 1990s there have been *three candidate countries*, namely Lithuania, Bulgaria and Romania, *where savings have remained rather low* both as compared to the EU-15 average or other CEECs, and their own investment rates. They have all suffered from lenient (even negative) growth and usually considerable current account imbalances, as well.

Let's turn our attention to investment rates of the CEECs (see Figure 8). We can see that all of them but Bulgaria having had at least the same (Romania) or much higher GFCF ratios than the EU-15 average (approximately 20% of GDP) reflecting the strong need for new investments during transition. As argued, *neither transition to market economy nor catching-up to the EU can be realized without maintaining a relatively high rate of investment in longer period of time*. The point is whether these high rates of GCF are sustainable in the CEECs and in what ways can they be financed. Sustaining high rate of investment is a necessary condition but not sufficient for successful catching up. Much depends on the "quality aspects" of investment, that is how efficiently they are used and in what sectors. Beside physical forms of investment, investments in human capital (e.g. education) and knowledge (e.g. R&D) are not less important, since these are the factors that strongly determine the international competitiveness of countries (and firms) in our age and are shaping absorptive capacity as well as the efficiency by which capital is attracted and allocated.

### **3.2. Determinants of saving and growth in the CEECs**

The experience of developed and developing countries alike has clearly demonstrated that *sustained high rates of investment and growth cannot be achieved without strong domestic savings*. Thus in this section I will examine how some of the most important determinants of saving have been developing recently in the candidate countries.

#### **3.2.1. Domestic savings**

##### **3.2.1.1. Improving intermediation: financial liberalization and banking reform**

World-wide experience and several empirical studies (see section 2) show *little or even negative direct effect of financial sector liberalization* on overall and private savings but point out to positive indirect effects via better growth potential. Nevertheless, since the topic of my recent paper is growth and not savings as such in a narrow sense, it seems useful to give a short overview how far CEECs have gone in this field. Obviously, in non of the CEECs a clear-cut picture emerges from the very mixed effects of financial sector reform on saving. On the one hand, by relaxing borrowing constraints (both for companies and households) and usually increasing real interest rates it is likely to have a negative effect. However, *by improving the intermediation from saving to productive investment it clearly has a positive impact on growth*. Furthermore, it increases the variety of saving instruments as well. The recent Asian crisis has highlighted the importance of proper allocation of savings among economic sectors, and prudent regulation and surveillance mechanism to control undesirable destabilization effects. CEECs still have much to go towards this direction. In the early phases of transition all countries had to face constraints stemming from the operation of an inefficient banking sector. Although most of the CEECs introduced a two-tier banking system in the early phase of transition, they were saddled with bad loans and controlled largely by the state. Under-capitalization, shortage in professionals with adequate credit-risk assessment skills, lack of competition, etc. led to poor efficiency in the allocation of savings. For many years non-performing loans were often rolled-over to large, loss-making state-owned enterprises (see e.g. Temprano, 1995). Furthermore,

small and medium-sized enterprises, new but promising private ventures have got hardly access to bank financing: a problem that is still alive throughout the region. Under these circumstances *restructuring of the banking sector has had favorable long-run impacts on growth*. Several types of *strategies* have been applied to deal with banking crises: most CEECs have generally pursued extensive restructuring and recapitalization of the banks, while the Baltic states have usually carried out a *combination of liquidation and restructuring*. Although the former (bailing out) strategy incurred higher fiscal costs, ended up with sounder, more efficient banking systems (see e.g. Claessens, 1996; Tang et al., 2000). Furthermore, many of the recapitalized banks have been *privatized to strategic foreign investors*. All these strategies were complemented with a new entry approach, as well. By 1999 in Hungary, Poland, Latvia and Romania more than half of their banks were operating as partly or fully foreign-owned. Taking into account its time-consuming character and *vast fiscal costs*, it is not by chance that most CEECs have made progress in their banking reform only since the second half of the 1990s. That is why these countries are still less advanced in this area as compared to trade and price liberalization or privatization, as indicated also by the EBRD transition indicators (see EBRD, 2000 and Figure 12). *Some countries have proved more successful and have progressed with banking reform in time. But some others postponed the necessary measures* at least until getting on the verge of financial crisis. Here are some examples: Bulgaria was forced to speed-up banking reforms in 1997 due to its financial crisis. Since 1997 privatization of the banks has progressed leaving only the State Savings Bank in public ownership. However, credit ratio to the private sector remains low since banks continue to hold government bonds instead of extending commercial loans. Romania began privatization of its state banks only in 1999 amid financial turbulence. Financial crisis led to the closure of Bancorex, the biggest loss-making bank, the collapse of the largest investment fund and put pressure on unregulated credit cooperatives. In countries that are more advanced in banking reform and privatization, the governments have usually retained controlling stakes only in few banks (e.g. in Poland in two large banks, PKO Bank Polski and BGZ the agriculture bank; following the sale of Optiva Bank the government of Estonia has no more controlling shares in the banking sector, etc.). Due to consolidation and liquidation, *the number of banks has decreased considerably throughout the region* (see Table 2). As it is depicted on Figure 12, countries that started negotiations with the EU in 1998 have gone ahead of other countries in the region in both *bank sector and non-banking institutions' reform*. Among them Hungary and Estonia are leading the row. Also the Baltic states seem to be more advanced in financial sector development. Asset share of state-owned banks is low (under 10%) only in some countries (Hungary, Estonia and Latvia), in many other countries state ownership still dominates. As for the operational efficiency, we can get a rough picture from the estimates on the *share of bad loans*. Some countries such as the Czech Republic, Romania and Slovakia are still suffering from the high share of non-performing loans. Even IMF admits that while *macroeconomic stability had to be secured before countries could proceed effectively with both enterprise and financial sector reforms*, these reforms can also be considered as pre-condition for sustaining stability (see IMF, 2000, p. 120.). Although the core elements of a proper legal and regulatory framework for the banking sector were put in place in most candidate countries, *implementation and enforcement problems* remain widespread. Prudential bank regulations in the CEECs are largely aligned with EU's directives, however, according to some views candidate countries may overshoot those

directives, at least until the transition process is completed (see e.g. Talley et al., 1998). They argue that EU banking directives were designed for more stable economies and for banking systems less vulnerable to reversals in capital flows. The extent of intermediation in terms of *credit extended to the private sector* is still more limited, in this respect CEECs differ widely both as compared to each other and to the EU (see Table 2). Of the CEECs only the Czech Republic, Slovakia and Slovenia have a share of such credits over 35% of GDP, i.e. comparable to market economies at similar level of development. In all other countries domestic *credit allocation to the enterprise sector is rather limited that obviously puts an obstacle to corporate investment*. The rather low shares in many CEECs are comparable to those of Latin-American countries during the debt crisis of the 1980s suffering from high inflation and strong monetary tightening. Also the *broad money-to-GDP ratio*, an indicator of financial deepening (that is supposed to have some links to savings, see section 2.2.) is generally lower in the CEECs than in EU countries, except the Czech and Slovak Republics where it may reflect banking sector problems (see table 2).

Figure 11

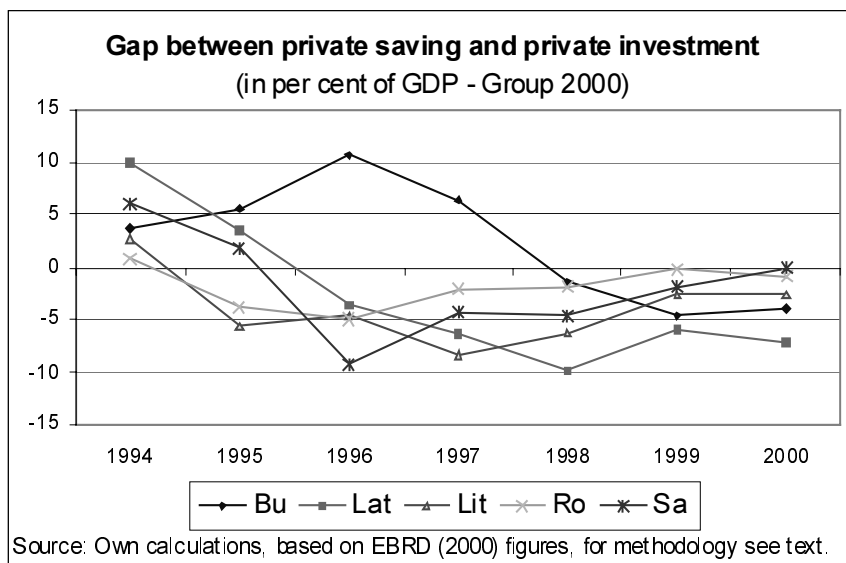
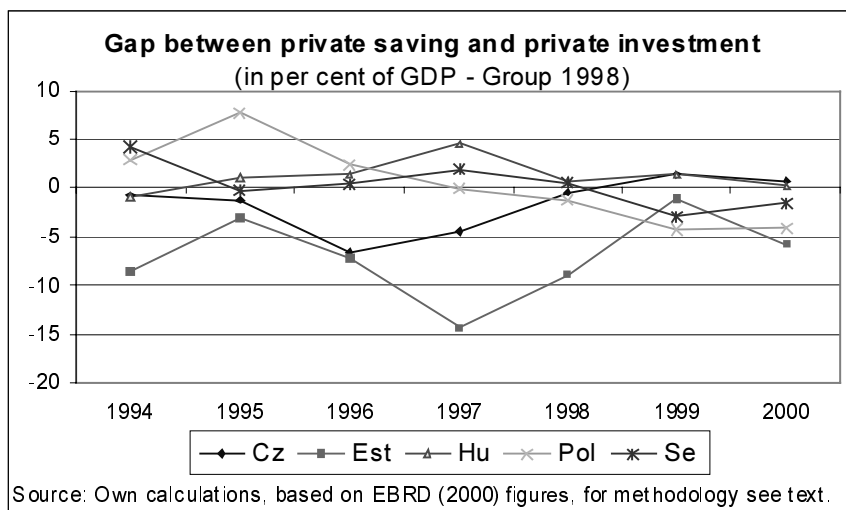
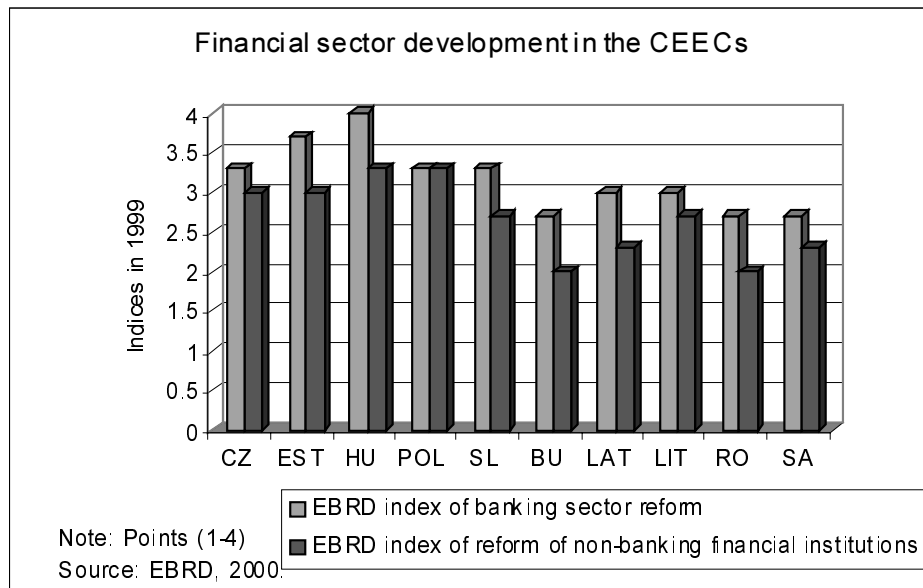


Figure 12



Following the Asian financial crisis even the IMF has raised *some concerns as regard to too much progress in capital account liberalization* in the CEECs while the financial sector is in less than full health (see IMF, 2000, p. 143.). Development of the *non-bank financial institutions*, including insurance companies and securities markets, has long been even more limited, however, there have been some promising signs of recent improvement in most countries. There are only *few stock markets in the region with sufficient capitalization and liquidity*. Some of them have already overtaken the smaller EU markets in terms of market capitalization and trading volumes. There are some signs for increased regional co-operation and integration among markets (see EBRD, 2000). Some countries still suffer from lack of enforcement regulations, inadequate financial disclosure, and insufficient transparency of trading. Stock market capitalization is among the highest in Estonia, Hungary followed by the Czech Republic and Poland (see Table 2). All in all, *financial sector reform seems to have considerable fiscal costs already in the short run, but in the longer run it can reduce the costs of financing investment* and offer a much *wider range of financing instruments* to mobilize savings. (For more details on the emergence of alternative saving instruments such as pension funds, portfolio investments, etc. see also in sections 3.2.1.4. and 3.2.2.)

Table 2

### Indicators for financial sector development (1999)

	<b>Czech R.</b>	<b>Estonia</b>	<b>Hungary</b>	<b>Poland</b>	<b>Slovenia</b>	<b>Bulgaria</b>	<b>Latvia</b>	<b>Lithuania</b>	<b>Romania</b>	<b>Slovakia</b>
Number of banks (of which foreign owned)	42/17	7/2	39/27	77/39	31/5	28/7(*97)	23/12	13/4	34/19	25/10
Asset share of state-owned banks (%)	23.2	7.9	9.1	25	41.7	66 (*97)	8.5 (*98)	41.9	50.3	50.7
Bad loans (in percent of total)	31.4	3.1	2.8	14.5	10.2	12.9 (*97)	6.3 (*98)	11.9	36.6	40
Domestic credit to enterprises (% of GDP)	43.8	26.3	20.6	18.8	35.9	14.6	16.7	10.1	10.5	37.8
Stock market capitalization (% of GDP)	23.1	37.1	35.7	20	11.9	6	6.3	10.7	3.1	3.8
Broad money (% of GDP)	77	39	45	43	33	30	37	21	23	68
EBRD index of banking sector reform*	3.3	3.7	4	3.3	3.3	2.7	3	3	2.7	2.7
EBRD index of reform of non-bank.fin.inst.*	3	3	3.3	3.3	2.7	2	2.3	2.7	2	2.3

\*) Points between 1-4

Source: (EBRD, 2000), (IMF, 2000).

### 3.2.1.2. Corporate savings and increasing profitability

Although no detailed statistics are available for corporate savings in the CEECs, it is deducible from indirect information that *most of the improvement in gross national saving* that has been observable since the second phase of transition *can be attributed to an increase in savings of the enterprises*. At the beginning of the transition it was just the sharp fall in corporate savings that was responsible for the dramatic collapse of GNS in the CEECs. Due to several factors including market loss, high inflation, wide-spread liquidity problems, increasing competition etc. many enterprises got in trouble. To tackle these problems transition countries have been forced to *progress with corporate restructuring*.

This, among others, necessitated to allow non-viable firms accumulating large debts to go bankrupt. However, CEECs differ widely both in the timing and strictness of *bankruptcy laws* that have been adopted. Some countries were relatively fast in this field by enacting bankruptcy laws back in the early phase of transition (e.g. Hungary, Czech Republic, Slovakia /1991/, Estonia, Lithuania /1992/), but most of them amended it or replaced with new laws in subsequent years. Bulgaria, Slovenia /1994/, Romania /1995/ and Latvia /1996/ were latecomers in this aspect of transition. Of the candidate countries *EBRD has identified Bulgaria and Romania where corporate governance and restructuring have remained a major reform backlog* in transition (EBRD, 2000). Despite laws being in force, several CEECs have been slow in progress with bankruptcy proceedings, either due to inefficient enacting clauses or overburdening of the courts. Depending on countries, governments spent a large, but usually decreasing amount of budgetary subsidies to keep major firms in strategic sectors alive, this amount reaching in a few cases some per cents of GDP. Certainly, the so-called market-cleaning is one of the most awkward fields of transition. It brought about a sharp rise in unemployment throughout the region.

As another way of responding to the lack of necessary financing and taking efficiency considerations seriously, CEECs carried out privatization of their state-owned enterprises. By now, with some exceptions, *CEECs have carried out probably the most ambitious privatization schemes over the world*. Some governments have been more reluctant or moderate in divesting themselves of state assets. Candidate countries have applied rather different privatization methods (e.g. direct sales to strategic investors, management buy-outs, vouchers etc.). A common feature of the transition process in the CEECs has been that small-scale privatization has been carried out at much faster pace than selling of large state-owned enterprises (see e.g. the development of EBRD privatization indices). Liquidation of insolvent enterprises, privatization and setting-up new firms have all contributed to progress with economic restructuring to produce more marketable products and services. However, *no privatization per se can be considered as a guarantee for successful restructuring*, it is influenced by many factors. Shifting of exports to Western markets, production lines to marketable goods, recovery of long-depressed domestic markets have all improved the profitability of enterprises. Balance sheets of (large) enterprises indicate a definitely *improving profitability*, at least in the more advanced candidate countries. It makes possible for a large (and ever increasing) segment of enterprises to *invest from retained earnings* (own saving), *the cheapest form of financing investments*. Furthermore, restructuring and recapitalization of the banking



sector and development of non-bank financial institutions, including capital markets have *improved access of companies to external financing* (external saving). It should be noted, however, that the development of the financial sector (including securities markets) is rather uneven in some CEECs and there are large discrepancies across countries. In the less advanced CEECs both the number of companies traded on stock exchanges and the trade volumes are extremely low. The local capital (including bond) markets do not serve as a source of capital for most enterprises, particularly not for small and medium-sized ones. In most of the CEECs *there are only some dozens of firms* (mainly foreign-owned blue-chip companies) *that have good access to both domestic and external financing instruments*. Some of them have successfully appeared also on the corporate Eurobond market.

### 3.2.1.3. *Public (dis)savings and burden of social security*

As discussed in more details in section 3.1. fiscal imbalances (public dissavings) have persisted in the CEECs since the start of transition. In the early phase it was mainly due to a fall in revenues because of declining output, tax reforms, inefficient tax collection as well as high expenditure associated with rising unemployment, structural reform measures, in some cases also rising interest payments on debt, etc. On Figure 5 we can also see that by 2000 *general government deficits* have decreased in the CEECs, however, *with few exceptions have remained in the range 2-4 per cent of GDP*. This is further complicated by the non-transparent and quasi-fiscal nature of much government spending, often associated with implicit subsidies for existing enterprises (IMF, 2000). In the Czech Republic, for instance, to get a clear-cut picture the official budget deficit must be adjusted to cover the deficits of off-budget entities (primarily the Consolidation Bank) and official public debt for the expanding state guarantees (see e.g. EBRD, 2000). Although in most CEECs decreasing somewhat, the *size of the government* (as measured by revenue and expenditure ratios to GDP) has remained generally larger in the CEECs than in many other market economies at similar levels of income. It should be noted, however, that *public sectors of the candidate countries on average have roughly the same size as their counterparts in the EU*. From the European point of view the difference is not striking at all, hence most EU countries also have general government expenditure ratios over 40 per cent of GDP. Furthermore, as the Wagner's law states, government expenditure as a share of GDP tends to rise with per capita income, reflecting income-elastic demand for key government services. However, there are *significant differences across countries in the structure of government expenditures*. In most of the CEECs both current expenditures, including social assistance and government consumption, and government transfers are relatively large. On the other hand, the revenue structure in the CEECs may reflect their development level. There are some differences across countries, especially in direct taxation of profits and personal income, but on average the structure of revenue seems to be resembling those of most EU countries. In 1999 the highest marginal personal income tax rates of the CEECs were in the range 25% (Latvia) to 45% (Romania), while the profit tax rates fluctuated across countries between 18% (Hungary) and 40% (Slovakia) (see World Bank, 2000/2001). Profit and personal income taxes, together with social security contributions, on average amount to approximately 22% of GDP in the CEECs (counted without Bulgaria and Romania, see EBRD, 2000, p. 55). Preparations for EU accession and NATO membership for some CEECs mean some further pressures on their budget (for more details see section 4). At the same time ageing of the population, high and

even increasing deficits of the health and pension funds in several candidate countries necessitate to speed-up *reforms of the inherited, quite generous, social security systems, a crucial element to restore fiscal balance*, discussed separately in the following section. These reforms seem to be even more inevitable to put fiscal imbalances under control, otherwise further cuts in current expenditures and/or raising of taxes will be needed, and both of these measures can undermine economic development by worsening the quality and scope of basic government services and lowering entrepreneurial spirit.

Moreover, fiscal imbalances may increase macroeconomic vulnerability, and to some extent *public borrowing can crowd out private investment* and thus reduce growth. We can get a rough picture on the importance of public deficits in creating gaps between gross national saving and investment ratios by calculating *gaps between private saving and private investment*. Similarly to what has been done by the EBRD (see EBRD, 2000) I have made calculations based on the difference between current account deficit and general government deficit for the CEECs (see Figure 11). Looking at the recent two years (1999-2000) one can see that all of the candidate countries have run general government deficits. However, there have been only two countries of the ten CEECs where private saving has exceeded private investment, the *Czech Republic* and *Hungary*, in these countries *current account deficits seem to have been entirely the consequence of fiscal imbalances*. In other countries negative budget balances have further widened the gap developed between private saving and investment.

#### 3.2.1.4. *Urbanization, ageing and pension reforms*

There is no general agreement among researchers whether the *urbanization ratio* has a positive and significant relationship with gross national saving (see section 2.2.). Without attaching too much importance to it, I would like here only to show some statistics. There are considerable discrepancies across countries in this respect: of the CEECs other than the Baltic Republics, the Czech Republic represents the upper (75%) and Romania (55%) the lower end in the row. The impact of demographic trends on savings seems much more important. Most analytical papers agree that an increase in both young and old dependency ratios has a significantly negative effect on saving. From this point of view the average trend is negative in the region, similarly to several developed countries in Europe and elsewhere. *Of the ten CEECs there are only two countries, namely Poland and the Slovak Republic where the number of population was maintained or even increased* over the last five years. All the other CEECs are still struggling with a continuous decrease in population. The most dramatic fall has been observable in Bulgaria, Estonia and Latvia (i.e. in countries where there was a noticeable emigration of ethnic minorities to the neighboring countries). As *ageing of the population has become the trend* throughout the CEECs, and owing to generosity of the former social security systems, unfunded pay-as-you-go (PAYG) *state pension schemes have become financially unsustainable in the long run*. In the course of the 1990s the reform of the old-age security systems inherited from the socialist past became ever urgent. (For a thorough analysis of this topic see e.g. Müller, 2000; EBRD, 1996/2000; Vittas, 1996). During socialism, a unified old-age security system was created and integrated into the state budget, thereby cross-subsidizing other expenditure items. In this system pensions tended to depend on the years of service rather than on the level of contributions. Beside ageing of the population and inherited *generosity* of the system (e.g. relatively high replacement rate /i.e. pension-wage ratio/, low

retirement age, etc.) some new factors put also a strain on the sustainability of the system. Since the start of transition the number and rate of employed has decreased. Furthermore, due to a noticeable increase in the number of disability pensions and early retirement schemes (as a substitute for welfare and unemployment benefits) *dependency ratios have deteriorated considerably*. More precisely it means that currently in all the CEECs there are less than two contributors per one pensioner. These ratios are similar to the ones in the EU. Furthermore, some countries are struggling with mounting social security *payment arrears*.

Despite strong political resistance, all these circumstances have prompted most CEECs to start with pension reforms. All the countries have considered to *make parametric changes to the existing retirement schemes*. There are some choices, however, all of them inevitably meet high resistance: both retirement age and contribution rates can be increased or the generosity of pension benefits decreased. The latter may involve the abolition of privileges, the restriction of early retirement, tightening of eligibility criteria for invalidity pensions, etc. However, most of the CEECs have gone further than these changes and have recently introduced *new pension schemes*.<sup>4</sup> The ways followed by the CEECs reflect considerable diversity. There were models (e.g. the Chilean or Argentine cases etc.) to follow but also innovative solutions emerged. Some countries such as Latvia followed by Poland introduced *notional defined contribution (NDC) plan* to the existing public tier; this has the advantage of higher transparency, adjustment to an increase in life expectancy, incentive for formal employment and late retirement. Most of the CEECs (except Slovakia, Romania, Lithuania) have already introduced *fully-funded (FF) schemes*. Even those countries that have been more cautious towards reforms are going to follow suit. Many countries have built or still consider to create a *three-pillar system* consisting of a public PAYG system, a mandatory privately managed second pillar, and a voluntary third pillar (e.g. Hungary, Poland, Bulgaria, etc.). Since 2000 Slovenia has built up a supplementary fully funded pillar to the reformed PAYG system and, although it is voluntary, it may become part of wage contracts (EBRD, 2000). Some countries still suffer from significant *implementation problems*. Even the *World Bank*, a major proponent of FF schemes advocates now a *gradualist strategy in pension reforms*. Theoretically private pension funds have some advantage in comparison to unfunded or PAYG systems. In the latter system pensions are financed by contributions from current workers (i.e. by intergenerational redistribution) while in the former individual capitalization accounts provide for more transparency and justice. Furthermore, private funds that collect savings for old age can contribute to the *development of local capital markets*, which may lead to better portfolios. Nevertheless, considerable *uncertainties still exist* whether to what extent these pension reforms can contribute to raise national savings (see section 2.2.). As Samwick (2000) argues, no country other than Chile that has moved towards FF-schemes has yet experienced a significant increase in savings since the reform began. Also Miles and Timmermann (1999) have found FF pension reforms risky and *the transition rather expensive*. By analyzing the experience of the EU member countries they have concluded: *both funded and unfunded systems bear some risks*, but they are certainly different. In the former case, heavy reliance upon equity

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<sup>4</sup> But this new approach made for them possible, at least for some time, to postpone the necessary reform measures within the existing state pension system.

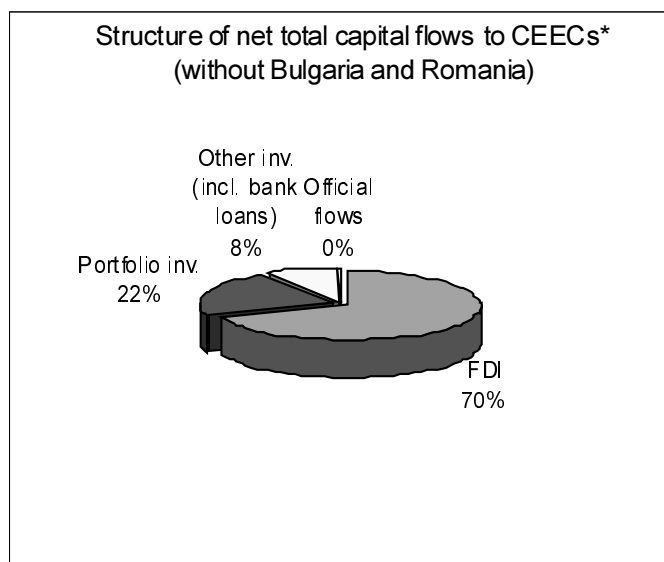
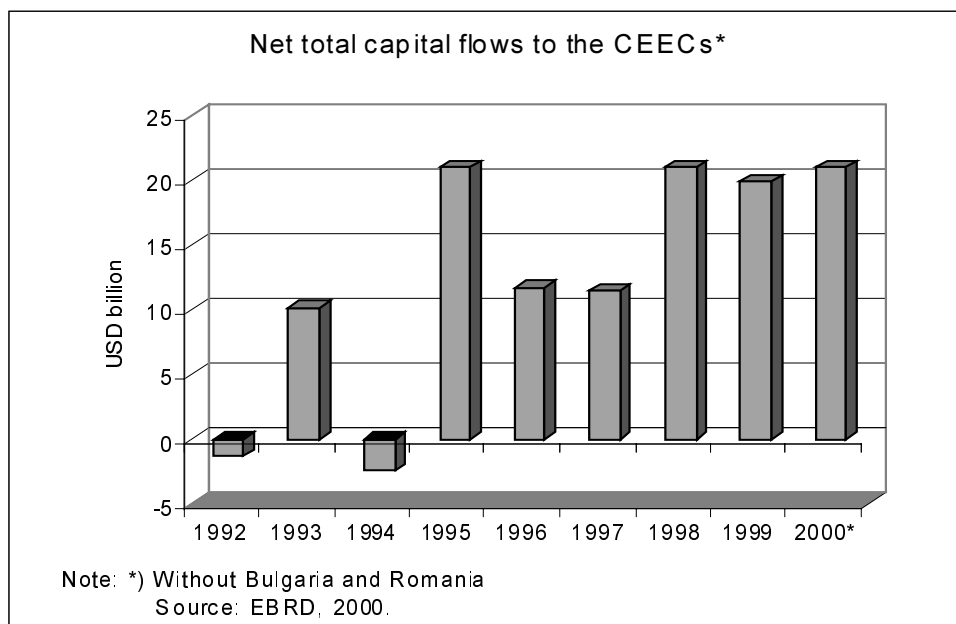
returns to generate pensioner incomes involves substantial risk (e.g. asset returns are different in booms and slumps). Furthermore, they calculated that the transition costs of switching to a FF system can be considerable, much higher than previous expectations. Furthermore, these high costs should be financed by current workers. For these reasons, they favor to have a mixed system, as there is, for example, in the Netherlands. Müller (2000) also came to the conclusion that pension reforms in the CEECs will, in the short and medium run, *exacerbate rather than lessen the pension-related burden* on the state budget.

### **3.2.2. Foreign savings: filling the gap**

In section 3.1. we could follow the trend of gross national saving (GNS) in various stages of market economy transition. National savings declined throughout the region in the early phase of transition but recovered in subsequent years. However, even in the most advanced CEECs *high and persisting current account imbalances indicate* that the huge investment needs of the candidate countries related to both transition and catching-up cannot be fully financed from national savings: *the gap is increasingly filled by foreign savings*. Because of special historical circumstances (e.g. restrictions on private ownership during socialism, heavy indebtedness of some countries etc.) since the beginning of transition CEECs have become heavily dependent on external financing. Furthermore, CEECs stepped just upon the road of market economy development when the globalization of international product and capital markets speeded up. The spectacular growth and *globalization of international financial markets have also enhanced the role and efficiency of allocation of savings internationally*. Institutional and technical development, financial innovations have led to important structural changes (e.g. emergence of institutional investors in allocation of savings across the globe, etc.), a relatively new phenomenon that effects the CEECs much stronger than countries involved in earlier enlargements of the EU. Under these circumstances CEECs have increasingly pursued an open and outward oriented policy stance, a direction that is strongly supported also by international organizations. Although there are still *large discrepancies across countries due to different approaches to market reforms and foreign investors*, there seems to be a convergence by now as market economy transition proceeds and official negotiations with the EU began. In this section I will review the main characteristics of foreign capital inflows to the CEECs. I will heavily rely here on a recent and comprehensive study by the EBRD (for more details see EBRD, 2000) and some other sources (see e.g. Claessens at al, 1998).

*Net capital flows to the CEECs have shown big fluctuations* since the start of transition (see Figure 13), similarly to other emerging markets. It has been the consequence of changing investors' confidence, policies pursued and macroeconomic prospects. The share of net *official flows* in total net flows to the CEECs has been low and even has decreased by now to negligible level in most countries. In recent years, out of the ten candidate countries Romania and Bulgaria have been the main recipients of official lending. In the other CEECs official flows have recently provided less than one per cent of total flows.

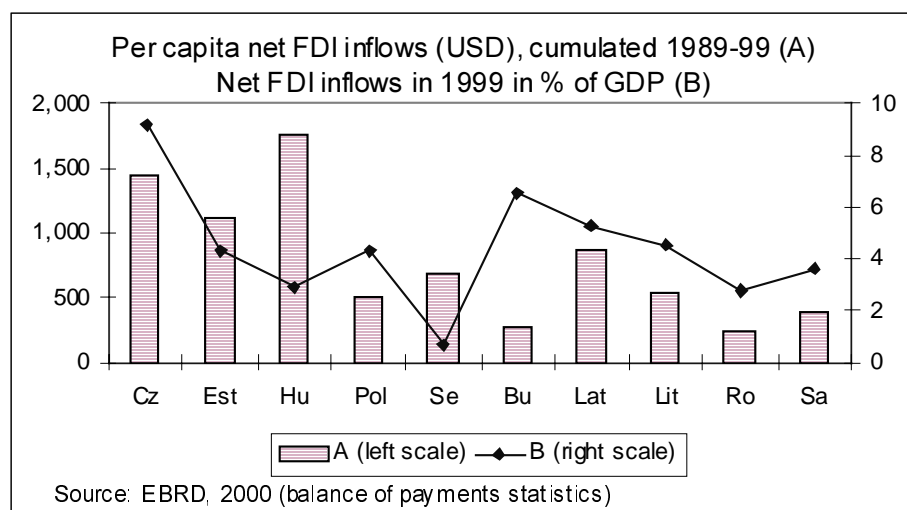
Figure 13



Of the private flows foreign direct investment (FDI) to the 10 CEECs has increased considerably, reaching an annual amount over 15 billion dollars in 1999. The bulk of this has been allocated to only a few countries (e.g. Hungary, the Czech Republic, Poland). As for cumulated FDI per capita (1989-99), Hungary, the Czech Republic and Estonia are leading the row, all have attracted over one thousand dollars of FDI per head of population. It should be added, however, that some other countries such as Bulgaria, Slovakia or Poland have registered their ever largest FDI inflows in recent years (see Figure 14). *FDI is still much related to privatization* of state-owned assets. In the past some years, cash privatization of companies to strategic investors, in particular in the banking and telecommunication sectors, has attracted a considerable part of FDI to the CEECs. Countries nearing the completion of their privatization schemes (see e.g. Hungary) are expected to attract FDI in the forms of green-field

investments, takeover and re-investment in existing companies. Major investments by foreign multinational companies have contributed significantly to the favorable shift in production and export structure that has been observable in some CEECs. Certainly, countries that have favored other privatization methods (e.g. vouchers) to sales to strategic foreign investors have attracted less foreign capital. From the saving and investment point of view it should be underlined here that incoming foreign capital as receipts for privatization of state assets is not being directly an investment per se, and also the national income that is substituted by foreign saving does not necessarily become saving but a source of higher consumption. *FDI to the region has proved remarkably resilient as compared to huge volatility in short-term capital flows.* Thus the *relatively high share of more stable long-term flows* (about 70% on average in 1999-2000) in total private flows can be considered favorable. On the other hand, global market turbulence related to the Asian and Russian crises has turned renewed attention to the role of short-term flows in transition, and its institutional and regulatory aspects. Some argue that setting-up of well-functioning and supervised financial markets seems to be an important pre-condition to avoid increasing instability and *vulnerability of the CEECs to external setbacks* and reversal in capital flows. And in this respect, many candidate countries, including the more advanced ones, still can be considered immature. For the same reason some see it as one of the major challenges that CEECs will have to face in the years to come *how to manage rising capital inflows while liberalizing the capital account.* Even the IMF, a major proponent of fast liberalization, seems by now to have changed its view and recommends for the accession countries to liberalize long-term flows first, and short-term flows only later on following more fundamental reforms (see IMF, 2000, p. 158.).

Figure 14



International bond issues and portfolio equity investment in the region's stock markets are the main forms of *portfolio investment* to the CEECs. The bulk of this has been allocated again to a few countries such as the Czech Republic, Poland and Hungary. (For FDI and portfolio flows to the CEECs see table 3) CEECs have increasingly gained *access to international capital markets* through Eurobond issues.

Public sector issuers, mainly sovereigns, dominate *Eurobond issues*. A few blue-chip companies in countries such as the Czech Republic, Estonia, Hungary, Poland and the Slovak Republic provide for the bulk of private Eurobond issues. While the Russian crisis in 1998 hindered the emergence of the most advanced CEECs on the Eurobond market, this effect turned out temporary only. Since then a considerable *improvement in investors' confidence* towards the region has been observable which can be attributed to good economic prospects of the CEECs as well as to anticipated EU membership. This improved confidence is reflected also by noticeably *better borrowing terms* (e.g. much lower spreads and longer maturities). In some of the CEECs *domestic bond markets* were also opened to foreign portfolio investors, and most of the latter have actively invested into domestic sovereign debt instruments (e.g. on the treasury bills market in Poland, etc.). By contrary, *international equity issues* from companies of the CEECs have remained much more limited. As analyzed in section 3.2.1.1., there are only few CEECs where local *stock markets* have sufficient capitalization and liquidity. Although there were rebounds on the stock markets across the region, portfolio equity inflows to the CEECs have continued to concentrate on a few more advanced countries, the Czech Republic, Hungary and Poland. Even in these countries equity issues are dominated by some blue-chip and huge local companies.

As for *international bank lending* to the CEECs, it has increased since the start of transition. An important feature of these flows has been that private sector has taken over as the primary recipient as compared to the banking sector. Also the maturity structure has shifted considerably from short- to longer-term. All in all, *CEECs are still rather different in their access to international capital markets* reflecting their economic and institutional development and policy stance. However, it can be seen that *an ever larger selection of international financing (saving) instruments is available* for them, particularly for the most advanced CEECs, that may increase safety, reduce volatility and also the costs of financing investments. Making use of foreign savings, especially their more stable forms, can help to meet increasing investment needs of the CEECs, even though they not only complement, but at least to some extent, substitute domestic savings.

#### **4. Run-up to and after accession: policy recommendations**

It is still ambiguous when negotiations on accession of the CEECs will be completed and they become formal members of the EU. At the moment, a case by case approach based on "satisfying the required economic and political conditions" (the so-called Copenhagen criteria) seems more likely, reflecting differences in levels and stages of development, however, *several important conditions of the accession are still uncertain*. Consequently, the Eastern enlargement of the EU will more likely be a multi-phase rather than a one-time process, and will not start before 2003, at best. By that time even the EU should be prepared to admit new members that requires, among others, to progress with controversial institutional reforms. In the years to come the candidate countries should proceed with market and institutional reforms to be able to face competition in the Single European Market. The target of EU membership can also serve as a driving force to continue reform efforts. Also the applicants may become more attractive for foreign investors both within and outside Europe.

Table 3

Foreign direct and portfolio investments to the CEECs  
(Million USD)

	<b>Bulgaria</b>	<b>Czech R.</b>	<b>Estonia</b>	<b>Hungary</b>	<b>Poland</b>	<b>Latvia</b>	<b>Lithuania</b>	<b>Romania</b>	<b>Slovakia</b>	<b>Slovenia</b>
Cumulated up to	<i>1998</i>	<i>1999</i>	<i>1999</i>	<i>1999</i>	<i>1998</i>	<i>1999</i>	<i>1999</i>	<i>1999</i>	<i>1999</i>	<i>1999</i>
Inward FDI	1,348.3	16,246	2,467.3	19,191	22,479	1,885	2,063	5,296	2,817	2,683.5
FDI abroad	3.5	908	281.2	1,482	1,165	215	25.9	133	340	621
Portfolio investment (Assets)	602.1	2,900	305.2	367	1,093	533	32.5	1,112	145	62.7
Portfolio investment (Liabilities)	5,148.9	4,602	771.8	16,934	13,658	275	833.6	2,521	1,843	1,733.5

Source: IMF, International Financial Statistics Yearbook, 2000. Based on balance of payments statistics.



To the degree comprehensive market reforms proceed, stability can be reinforced in the region. This can provide favorable but necessary conditions for long-run growth and catching-up. A crucial question will be whether CEECs can *maintain or enhance the momentum of reforms* in areas where they are less advanced (e.g. financial sector, corporate restructuring and governance, social security systems, etc.). We could see in the previous sections that these areas have much to do either with enhancing the efficiency of saving allocation, or the increased level of gross savings. By 2000 all the CEECs have already achieved growth. Several candidate countries have *good prospects for sustaining growth trends*, however, some of them, where recovery is still fragile and less broadly based, should face higher *risk of future setbacks* and the subsequent need for further adjustments. When looking at the main macroeconomic indicators we could observe a convergence by impressive improvement in recent years, however, *structural and institutional indicators of transition*, which are indicators for the long-run sustainability of growth, *have shown much discrepancies across countries*. Restructuring and modernization of the CEEC economies, a precondition of sustainable growth, require to *maintain high rates of investment*. And indeed, high investment rates achieved in most of the CEECs indicate that this development is well underway. It can be encouraged by *alleviating impediments to private sector activity*, but *should also be underpinned by sound domestic savings*, in order to escape unsustainable external imbalances and high vulnerability to changes in investors' sentiment. However, some of the less advanced CEECs are still struggling with depressed national saving rates that make them impossible to meet investment demand stemming either from the needs of transition or of modernization necessary to satisfy the conditions of EU membership. One of *the most significant risks* throughout the region in the years to come will be high, and in some cases, increasing *current account deficits*. Although this trend, on the other side, indicates an increasing inflow of foreign capital to the CEECs, the key question is whether this can be sustained. If external imbalances are getting stuck at a high level over a longer period of time, it may indicate inefficient use of foreign capital and weak contribution to economic restructuring. However, without such restructuring neither economic growth can be sustained nor catching-up completed. More flexible exchange rates may automatically indicate the disequilibrium that would lead to persistent current account deficits.

As for savings, *the most certain way of increasing the rate of saving is via growth*. Recovery can lead to an improvement in income position of both enterprises and households that may draw up savings, and via higher revenues it can improve the government's budget position as well. This trend can be, at least partially, offset by some other factors. Following several years of contraction, real incomes of households have actually increased in most CEECs. However, this development is only partly reflected in higher savings but an *increase in current consumption*. Anticipated prosperity and permanent income growth (related to a large part to EU accession) are supposed to lead to this latter pattern, as do takeover of Western consumer habits. The ever increasing use of consumer credits (and also mortgage loans, as well as in some countries such as Hungary loans for construction/buying houses), is expected to have the same effects. Because of these trends no traditional means of government control (e.g. interest rates) are likely to prove efficient enough in the household sector. The utilization of *incomes* cannot be debated on moral grounds, but *should be kept under*

*control*, otherwise it will deteriorate international competitiveness, and through higher imports of consumer goods may increase trade and current account deficits. Sustaining global competitiveness can be considered inevitable to keep foreign investors' interest alive.

As international experience shows us, the *increase in public saving* (or decrease in dissaving) *can be the most direct and efficient way of how government policy can improve national saving rates*. Although there is still considerable potential for improving general government balances (and especially the efficiency of government services), the CEECs actually have very *limited room for maneuvering*. Ensuring conditions for a long-run growth track requires huge expenditures by the government sector. As underlined, *investment into the creation of knowledge* (R&D) and in *human capital* (education, health), is a precondition for long-run sustainable growth and global competitiveness in our age, even though it is expected to bring fruits in the longer run. However, over many years most governments were forced to cut expenditure on developing these strategic sectors due to a decrease in revenues and increase in social security spending. There are several fields (like infrastructure, environment, etc.) where CEECs are still underdeveloped as compared to EU countries, thus requiring substantial amount of resources to invest there. *Development of the banking and non-banking financial sector* still falls short of their EU counterparts in most CEECs, although without it neither financial integration in the EU, nor efficient collection and allocation of saving can be achieved. *Building a sound financial system is also a precondition for sustaining economic stability* and avoiding financial turmoil. Recapitalization and reform of the banking system is still underway in most CEECs and will require large amount of capital.

To control unmanageable expenditure growth, *reform of the social security system cannot be avoided*. Due to high transition costs, reform of the pension system is not likely to result in a noticeable increase in gross savings, nor a decrease in general government deficits, at least in short to medium run. Setting-up FF pension funds may have a favorable impact on household savings. However, without parallel progress in *administration/supervision of pension funds* and *development of capital markets* they will not meet expectations. Owing to existing obligations, no radical change can be expected unless the generosity of existing PAYG pension systems is also reduced. Increasing uncertainty over future pensions may encourage people to look for other forms of pre-cautionary savings.

With growth gaining momentum throughout the region, governments' *revenues are expected to increase* and also the burden of unemployment benefits may ease somewhat. Raising of taxes should be avoided, if possible, hence it can repress the propensity to save for business and because *statutory tax rates are already high*. Where it is justified, the structure of taxes can be modified. However, there is still much scope in improving the efficiency of tax collection. As stated in section 2. tax incentives have usually less to do with creation of new savings but may evoke portfolio shifts. Because of competition policy reasons, favoring strategic sectors by tax incentives will become ever harder to manage as accession comes near. In the years to come most governments will face the *dilemma how to cover substantial expenditure needs* (as mentioned before) *while tax/debt increase should be avoided and privatization revenue is on the decline*.

A key growth factor is how *macroeconomic environment* and *business climate* evolve. That is what government policy can and must influence the best. An environment conducive to businesses, indigenous and foreign alike, may improve profitability of firms, thus a growing number of companies will be able to invest from retained earnings, the cheapest form of financing. To this end, *urging of corporate restructuring* should also be enhanced, a field where most CEECs have remained backward. The efforts cannot be confined only to large privatized (mostly foreign-owned) companies, but *should cover SMEs*, as well. Focusing only on luring foreign multinational companies may have unwanted consequences, and the indigenous enterprise sector of the CEECs will have less chance to withstand the sharp competition on the Single European Market, and this may have negative consequences on gross corporate saving, as well. Theoretically, due to increased competition, less efficient firms are driven out of market that may result in a growing overall profitability of the enterprise sector. Nevertheless, the concept of creative destruction does not always seem to work properly in the practice. If a considerable part of SMEs are not able to survive in the long run (owing to lack of a level-playing field, and not only because of the presence of free competition), this will prevent favorable structural changes from spreading over the whole economy. This segment of the corporate sector *should be better targeted by various programmes* (similarly to several Community-level and member-country schemes), well before accession. Catching-up to the EU in terms of income per capita can be achieved even if regional discrepancies as well as differences between indigenous SMEs and large foreign-owned firms widen. Catching-up should be prompted and realized in these company segments and fields, as well.

Although government budgets are already overburdened, and there are a lot of tasks to undertake, the *accession itself requires substantial additional resources* to spend. Compliance with environmental standards, transport infrastructure, legal harmonization, institutional building etc. all require additional expenditures. Several recent studies (see e.g. IMF 2000, EBRD 2000) have tried to estimate the fiscal costs related to EU accession. The two largest areas of pre-accession expenditure are the compliance with *legal and institutional building* requirements of the *acquis* and with the *environmental standards* of the EU. In the environment sector, water and air pollution as well as waste management account for the bulk of expected costs that are estimated to be about 1.5 per cent of GDP per year on average, however, less advanced CEECs should accommodate much higher costs. Fiscal costs of meeting EU requirements in the *transport sector* related mainly to building Trans-European networks, are put even higher, and are estimated to be about 2.5 per cent of GDP per year on average. There are also large discrepancies across countries, reflecting their size as well as the present development level of their transport infrastructure. *Environmental and transport costs together may sum up to 4 per cent of GDP per year* on average, at least for a decade or more. We have some estimates on recent accession related spending for some of the most advanced CEECs. In Hungary, for instance, the National Programme for the Adoption of the *Acquis* estimated a total EU related expenditure of about 2.5 per cent of GDP for the years 2000 and 2001, of which less than one-third will be covered by EU-transfers. Most of the costs are born by the central budget, and the remaining part by local governments and the private sector. Costs related to meeting requirements in other sectors of the CEECs (e.g. steel, energy, nuclear safety, agriculture, telecommunications, consumer protection etc.) should also be added that may amount to total costs of up to 10 per cent of GDP by some guesstimates. Furthermore, some of the

CEECs have recently *joined the NATO* and committed themselves to raise defense spending that may induce additional fiscal pressure. Although the reliability of these estimates is uncertain, without any doubt *CEECs should make enormous efforts to accommodate fiscal costs related to accession*. A crucial question is *to what extent these additional costs will be financed by EU-transfers*. The EU has made available *pre-accession support* for all the candidate countries for the period 2000-2006 (see decision by the European Council at the Berlin summit in March 1999) with an annual amount of EUR 3.1 billion, implying a support averaging about 1 per cent of GDP per year up to 2006, or until a candidate becomes EU member. This pre-accession financing provides assistance in the fields of technical assistance and training (Phare), agriculture (SAPARD), infrastructure and environment (ISPA). Assistance in the form of loans by EIB and EBRD is also available.

After EU accession, the new member countries will be eligible for assistance from EU Structural and Cohesion Funds and agricultural support. However, according to recent plans, *financial support of the EU will most likely be less generous* than during former enlargements of the EU. Practically it means that new members can get less support in the new financial framework than they would get under the present system. New members will have to make contributions to the EU budget, as well. To control increase in the costs of support, the EU has limited the structural assistance in any member state to 4 per cent of the national GDP. The EU budget as a whole is also subject to a ceiling of 1.27 per cent of EU aggregate GNP. Furthermore, for safety reasons, the EU has also agreed to a medium-term financial framework for an enlarged EU comprising 21 countries and to set aside financial support of about 1.2 per cent of current GDP per year exclusively for new members starting from 2002. Levels and forms of a new EU assistance framework after 2006 are still rather uncertain. One can see that using any methods for calculation, *there remains a significant gap to be financed either by the governments or the private sector of the CEECs*. There seems to be an important difference as compared to former enlargements of the EU when less advanced countries became members. *The burden of adjustment to EU requirements is now higher than ever, but most of this financing should be covered by the applicant countries from their own limited sources*. Most of the transfers from the EU in the Community Support Framework are likely to *supplement* national savings owing to co-financing requirements. Thus crowding out effects are expected to fall short of crowding in ones. *These transfers are expected to mobilize domestic private and public capital* for financing EU-supported projects. As the experience of less developed but successful member countries suggests, EU-transfers may give an important impetus to development in the very sectors (e.g. infrastructure, education etc.) which have strategic importance in long-term development. However, the efficiency of these projects is not taken for granted. This highlights the importance of *efficiency, competence and surveillance in allocation of funds*. With clear and well-elaborated national programmes in line with EU support, common goals can more likely be achieved. The broad experience of several recent member states in these fields should be more thoroughly analyzed.

It would be very important to realize that, at least *in the run-up period to accession*, *CEECs should focus primarily on real convergence* (i.e. growth, restructuring, etc.) and at least for some time attribute less attention to achieve as quickly as possible their ultimate goal of euro area accession. In particular, *the*

*Maastricht criteria* of meeting inflation, fiscal and exchange rate requirements *could potentially be in conflict with real adjustment and catching-up requirements* of the CEECs. Although the candidate countries are not required to become euro-area members as a precondition for EU membership, they should adhere to the aims of economic and monetary union (EMU). Realistically, to meet the Maastricht criteria on a durable basis they will need *adjustment periods*, the length of which varies across countries (see also IMF, 2000). It would neither be in the interest of the CEECs nor the EU to reduce the *scope for real convergence*. Prospects for a successful Eastern enlargement would improve if the EU was more tolerant concerning the transition-related characteristics of the CEECs, and provided a share of the resources necessary for adjustment as high as possible.

On the other hand, CEECs should become aware that it is not enough only to focus on meeting all the requirements related to the EU accession but to prepare their own transparent and well-founded *development strategies*. The experience of countries with impressive catching-up records clearly demonstrates that a well-thought out and forward-looking country strategy and wide *social consensus* behind that can largely improve the expected results and choices of a successful catching-up. The insufficiency of domestic financial resources presumes even more consciousness in allocation towards fields with better perspectives.

All in all, according to my view the most important question from the point of view of catching-up is not that how to enhance gross national saving in the CEECs, but how to encourage and put in motion a *virtuous cycle* of high growth, high investment and high saving. Thus *saving should constitute an element* (although an important one) *of a much wider and coherent economic policy* that draws up clear goals and signals for market players. As Levine and Renelt (1992) pointed out, national policies appear to be a complex package, thus interactions among policies should also be analyzed as opposed to the independent influence of any particular policy.

## References

- Árvai, Zsófia - Menczel, Péter (2001) A magyar háztartások megtakarításai 1995 és 2000 között. (Saving of Hungarian households 1995-2000). In Hungarian. In: *Közgazdasági Szemle*, February 2001. pp. 93-113.
- Asilis, Carlos M. - Ghosh, Atish R.(1992) The Savings Trap and Economic Take-Off. IMF Working Papers. WP/92/91-EA
- Attanasio, Orazio P. - Picci, Lucio - Scorcu, Antonello(1998) Saving, Growth and Investment: A Macroeconomic Analysis Using a Panel of Countries. Paper First Presented at the World Bank Meeting "Saving in the World" January, 1998. This version. September 1999.
- Bandiera, Oriana - Caprio Jr., Gerard - Honohan, Patrick - Schiantarelli, Fabio(1999) Does Financial Reform Raise or Reduce Saving? 1999. In: Policies and Institutions that Promote Savings. A World Bank Research Project.
- Bank of Estonia (200) Monetary Developments and Policy Survey. June 2000. Tallin.
- Bayoumi, Tamim - Masson, Paul R. - Samiei, Hossein (1995) International Evidence on the Determinants of Private Saving. IMF Working Papers. WP/95/51-EA.
- Beck, Thorsten - Levine, Ross - Loayza, Norman (1999) Finance and the Sources of Growth. World Bank Policy Research Working Paper. February, 1999.
- Besley, Timothy - Meghir, Costas (1998) Tax Based Savings Incentives. In: Policies and Institutions that Promote Savings. A World Bank Research Project. September 1998.
- Calderón, César - Chong, Alberto - Loayza, Norman (2000) Determinants of Current Account Deficits in Developing Countries. World Bank Policy Research Working Paper. July, 2000.
- Callen, Tim - Thimann, Christian (1997) Empirical Determinants of Household Saving - Evidence from OECD Countries. IMF Working Papers. WP/97/181-EA
- Claessens, Stijn (1996) Banking Reform in Transition Countries. World Bank Policy Research Working Paper. August, 1996.
- Claessens, Stijn - Oks, Daniel - Polastri, Rossana (1998) Capital Flows to Central and Eastern Europe and Former Soviet Union. World Bank Policy Research Working Paper. September, 1998.
- Denizer, Cevdet - Wolf, Holger, C. - Ying, Ivonne (2000) Household Savings in Transition Economies. World Bank Policy Research Working Paper. March, 2000.
- Denizer, Cevdet - Wolf, Holger, C. (1998) Aggregate Savings In the Transition. Paper prepared in the World Bank Research Project entitled "Saving Across the World". December 1998.
- European Bank for Reconstruction and Development (EBRD) *Transition Report*. 1996 and 2000.

- European Commission, Directorate-General for Economic and Financial Affairs (2000) Broad Economic Policy Guidelines. Convergence Report 2000. *European Economy* No. 70 /2000.
- Faruqee, Hamid - Husain, Aasim M.: Saving Trends in Southeast Asia (1995) A Cross-Country Analysis. IMF Working Papers. WP/95/39-EA
- Feldstein, M. - Horioka, C. (1980) Domestic Savings and International Capital Flows. In: *Economic Journal*. No 90. 1980. pp. 314-29.
- Ghosh, Atish R. - Ostry, Jonathan D. (1992) Macroeconomic Uncertainty, Precautionary Savings, and the Current Account. IMF Working Papers. WP/92/72-EA
- Heller, Peter S. - Symansky, Steve (1997) Implications for Savings of Aging in the Asian Tigers. IMF Working Papers. WP/97/136-EA.
- International Monetary Fund (IMF) (2000) *International Financial Statistics Yearbook*, 2000.
- International Monetary Fund (IMF) (2000) *World Economic Outlook*. Focus on Transition Economies. October, 2000.
- Kornai, János (1992) *The Socialist System: Political Economy of Communism*. 1992. Princeton University Press, Princeton, New Jersey.
- Kovács, Zoltán Á. (1996) Recent Evidence and Prospects for Growth in Central and Eastern Europe, Paper presented at the ACE Seminar "Economic Integration between the EU and Central-Eastern Europe" held in Milan, July, 1996.
- Kovács, Zoltán Á. (1997) Remarks on Parallels and Dissimilarities between Southern and Eastern Enlargement. Presented at the Workshop on "Macroeconomic Problems of an EU Enlargement to the East" held in Halle, February, 1997.
- Levine, Ross - Loayza, Norman - Beck, Thorsten (1999) Financial Intermediation and Growth: Causality and Causes. World Bank Policy Research Working Paper. February, 1999.
- Levine, Ross - Renelt, David (1992) A Sensitivity Analysis of Cross-Country Growth Regressions. *The American Economic Review*. Vol. 82, Nu 4. September 1992. pp. 942-963.
- Liberda, Barbara - Tokarski, Tomasz (1999) Determinants of Saving and Economic Growth in Poland in Comparison to the OECD Countries. CASE-CEU Working Paper Series. No. 18. 1999. Warsaw.
- Loayza, Norman - López, Humberto - Schmidt-Hebbel, Klaus - Servén, Luis (1998) Saving in the World: Stylized Facts. Paper prepared in the World Bank Research Project entitled "Saving Across the World" September 1998.
- Loayza, Norman - Schmidt-Hebbel, Klaus - Servén, Luis (Loayza et al. II) (1998) What Drives Saving Across the World? Paper prepared in the World Bank Research Project entitled "Saving Across the World" September 1998.
- Miles, David - Timmermann, Allan (1999) Risk Sharing and Transition Costs in the Reform of Pension Systems in Europe. In: *Economic Policy. A European Forum*. No. 29. October, 1999. pp. 251-277.

- Müller, Katharina (2000) From the State to the Market? Pension Reform Paths in CEE and the Former Soviet Union. WIIW Economic Studies 6/2000. pp. 20-29.
- National Bank of Hungary (a): *Annual Report*, 1999 and 2000.
- National Bank of Hungary (b): *Report on Inflation*, various issues.
- OECD (1997) *Short-term Economic Indicators*. Transition Economies. 4/1997.
- OECD (2000) *Economic Outlook*, No. 68. December 2000.
- Ogaki, Masao - Ostry, Jonathan D. - Reinhardt, Carmen M (1995) Saving Behavior in Low- and Middle-Income Developing Countries: A Comparison. IMF Working Papers. WP/95/3-EA.
- Rodrik, Dani (1998) Saving Transitions. Paper prepared in the World Bank Research Project entitled "Saving Across the World" July 1998.
- Samwick, Andrew (1999) Is Pension Reform Conducive to Higher Saving? In: Policies and Institutions that Promote Savings. A World Bank Research Project. November 1999.
- Talley, Samuel - Giugale, Marcelo M. - Polastri, Rossana (1998) Capital Inflow Reversals, Banking Stability, and Prudential Regulation in Central and Eastern Europe. World Bank Policy Research Working Paper. December, 1998.
- Tang, Helena - Zoli, Edda- Klutchnikova, Irina (2000) Banking Crises in Transition Economies: Fiscal Costs and Related Issues. World Bank Policy Research Working Paper. November, 2000.
- Tanzi, Vito - Zee, Howell H.(1998) Taxation and the Household Saving Rate: Evidence from OECD Countries. IMF Working Papers. WP/98/36-EA.
- Temprano, Heliodoro: Saving and Investment in Transition Countries (1995) *European Economy* Supplement A. No 7. July 1995. Issued by the European Commission Directorate-General for Economic and Financial Affairs.
- The Economist Intelligence Unit (EIU) (2000) Country Reports (on the CEECs), 2000.
- UN ECE (2001) Domestic Savings in the Transition Economies. *Economic Survey of Europe*, No.1. 2001. Chapter 4.
- Várhegyi, Éva (2000) Apadó megtakarítások (Shrinking Household Savings) (In Hungarian) *Világgazdaság*, 16 November, 2000. p. 12.
- Vittas, Dimitri (1996) Private Pension Funds in Hungary: Early Performance and Regulatory Issues. World Bank Policy Research Working Paper. August, 1996.
- World Bank: World Development Report. 1998/99 and 2000/2001. World Development Indicators 2000/2001.